LLNL Livermore Site Third Quarter 2008 Self-Monitoring Report

The following is the third quarter 2008 self-monitoring data for the treatment facilities and Lake Haussmann at the Lawrence Livermore National Laboratory (LLNL) Livermore Site. Due to over a 50% reduction in budget for the Livermore Site project in Fiscal Year 2008, the following facilities were shutdown: TFC East, VTFD-ETCS, TFD-HPD, VTFD-HPD, VTFD-HS, VTFE-ELM, VTFE-HS, TF5475-1, TF5475-2, TF5473-3, VTF5475, TF406-NW, TF518 North, VTF518-PZ, and TF518-PZ. The following facilities previously failed and were not repaired due to insufficient resources: TFC-SE, TFD-S, TFE-E, TFE-SE, TFE-HS, TFG-N, TF406, and VTF406-HS. Additionally, TFA, TFA-E, TFD, and VTF511 failed during this reporting period. Treatment facility mechanical and electronic issues will be evaluated and repaired as manpower and priorities allow. TFA West was also shutdown in January 2008 after a year-long treatability test.

The volumes of ground water and soil vapor treated and volatile organic compound (VOC) mass removed during the third quarter of 2008 are presented in Tables 1 and 2, respectively. Table 3 presents an historical summary of VOC mass and volume removed.

Attachment A presents ground water treatment facility and extraction well (ground water and soil vapor) VOC, chromium, bioassay, turbidity and chloride analyses (Tables A-1 through A-5). During the third quarter of 2008, all effluent sample analyses were within acceptable discharge limits.

Self-monitoring reports for all treatment facilities are presented in Attachment B. Monthly volumes of ground water extracted are shown in Attachment B; however, instantaneous flow rates are not shown for wells that are now only used for sampling and are not continuously pumped. The monthly volume shown for these wells is the quantity of water evacuated for sampling purposes. Monitoring data for Lake Haussmann are presented in Attachment C.

A well location map showing wells and treatment facilities, and ground water elevation contour maps showing hydraulic capture zones for hydrostratigraphic units (HSUs) 1B, 2, 3A, 3B, 4, and 5, are presented in Attachment D. There were no new monitoring wells installed during this reporting period. The contour maps for the individual HSUs are based on July data; due to the budget reduction, water levels were only collected during the month of July.

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Table 1. Volumes of ground water and soil vapor extracted and treated at the Livermore Site, July through September 2008.

| Treatment Area ^a | Month | Volume of ground water extracted (Kgal) ^b | Volume of vapor extracted (Kft ³) ^b |
|-----------------------------|-----------|---|---|
| TFA | July | 2,963 | - |
| | August | 2,207 | - |
| | September | 1 | - |
| TFB | July | 1,559 | - |
| | August | 1,778 | - |
| | September | 1,833 | - |
| TFC | July | 2,262 | - |
| | August | 2,167 | - |
| | September | 2,479 | - |
| TFD | July | 4,111 | 0 |
| | August | 1,837 | 0 |
| | September | 1,904 | 0 |
| TFE | July | 1,694 | 0 |
| | August | 1,533 | 0 |
| | September | 1,671 | 0 |
| TFG | July | 397 | - |
| | August | 368 | - |
| | September | 410 | - |
| TFH | July | 0 | 714 |
| | August | 0 | 456 |
| | September | 0 | 0 |
| TOTAL | | 31,174 | 1,170 |

^a Totals include ground water and soil vapor extracted from the following facilities:

Kft³ = thousands of cubic feet

Kgal = thousands of gallons

TFA area: TFA, TFA-E, TFA-W

TFB area: TFB

TFC area: TFC, TFC-E, TFC-SE

TFD area: TFD, TFD-E, TFD-HPD, TFD-S, TFD-SE, TFD-SS, TFD-W, VTFD-ETCS, VTFD-HPD, VTFD-HS

TFE area: TFE-E, TFE-HS, TFE-NW, TFE-SE, TFE-SW, TFE-W, VTFE-ELM, VTFE-HS

TFG area: TFG-1, TFG-N

TFH area: TF406, TF406-NW, TF518-N, TF518-PZ, TF5475-1, TF5475-2, TF5475-3, VTF406-HS, VTF511, VTF518-PZ, VTF5475

TFF started operation in February 1993 for fuel hydrocarbon remediation. In August 1995, the regulatory agencies agreed that the vadose zone remediation was complete, and in October 1996 a No Further Action status was granted for the ground water.

^b Totals are derived from individual extraction wells shown in Attachment B

^c Rounded number

Table 2. VOC mass removed at the Livermore Site, July through September 2008.

| Treatment Area ^a | VOC mass removed from ground water (kg) | VOC mass removed from soil vapor (kg) | Total VOC mass removed (kg) ^b |
|-----------------------------|---|--|---|
| TFA | 0.3 | - | 0.3 |
| TFB | 0.5 | - | 0.5 |
| TFC | 0.9 | - | 0.9 |
| TFD | 3.9 | 0 | 3.9 |
| TFE | 0.8 | 0 | 0.8 |
| TFG | 0.09 | - | 0.1 |
| TFH | 0 | 7.1 | 7.1 |
| TOTALb | 6.5 | 7.1 | 13.6 |

Table 3. Historical summary of volumes of water and soil vapor removed at the Livermore Site through September 2008.

| Treatment Area ^a | Volume of ground water extracted (Mgal) | Volume of vapor extracted (Kft ³) | |
|-----------------------------|--|--|--|
| TFA | 1,566 | - | |
| TFB | 353 | - | |
| TFC | 354 | - | |
| TFD | 820 | 49,708 | |
| TFE | 296 | 124,223 | |
| TFG | 57 | - | |
| TFH | 129 | 163,208 | |
| TOTAL ^b | 3,575 | 337,139 | |

Table 4. Historical summary of VOC mass removed from water and soil vapor at the Livermore Site through September 2008.

| Treatment Area ^a | VOC mass removed | VOC mass removed | Total VOC mass |
|-----------------------------|------------------------|----------------------|---------------------------|
| | from ground water (kg) | from soil vapor (kg) | removed (kg) ^b |
| TFA | 194 | - | 194 |
| TFB | 71 | - | 71 |
| TFC | 87 | - | 87 |
| TFD | 760 | 84 | 844 |
| TFE | 199 | 141 | 340 |
| TFG | 9 | - | 9 |
| TFH | 29 | 1,128 | 1,157 |
| TOTALb | 1,349 | 1,353 | 2,702 |

^a Refer to Table 1 footnote for facilities in each treatment facility area.

Abbreviations for Tables 2, 3 and 4:

 Kft^3 = thousands of cubic feet.

Kg = Kilograms.

Mgal = millions of gallons.

VOC = Volatile organic compound.

^b Rounded number.

Attachment A

VOC, Chromium, Bioassay, Turbidity, and Chloride Analyses

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

| Sample Station | Date Sampled | Analytic Method | CCI ₄ | CHCI ₃ | 1,1-DCA | 1,2-DCA | 1,1-DCE | 1,2-DCE | Freon 113 | PCE | 1,1,1-TCA | TCE | Freon 11 |
|---------------------|------------------------|--------------------|------------------|-------------------|--------------|--------------|--------------|------------|--------------|--------------|--------------|--------------|-----------------|
| | | | <- | - | - | - | ug/L (ppb) | - | - | - | <u>-</u> | - | -> |
| TFA ^a | | | | | | | | | | | | | _ |
| TFA-I001 | 01-JUL-08 | E601 | < 0.5 | 1.2 | 0.51 | < 0.5 | 1.2 | <1 | < 0.5 | 5.9 | < 0.5 | 0.71 | < 0.5 |
| TFA-I001 | 04-AUG-08 | E601 | <0.5 | 1.5 | 0.68 | < 0.5 | 1.5 | <1 | <0.5 | 8 | <0.5 | 0.92 | <0.5 |
| TE4 5004 | 04 11 11 00 | 500 4 | 0.5 | | 0.5 | | | | 0.5 | | | | |
| TFA-E001 | 01-JUL-08 | E601 | <0.5 | <0.5 | <0.5 | < 0.5 | <0.5 | <1 | <0.5 | < 0.5 | <0.5 | < 0.5 | <0.5 |
| TFA-E001 | 04-AUG-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TFA-E ^b | | | | | | | | | | | | | |
| W-254 | 08-JUL-08 | E601 | <0.5 | < 0.5 | 0.61 | < 0.5 | 0.97 | <1 | <0.5 | 65 | <0.5 | 1.7 | <0.5 |
| STU06-I | 05-AUG-08 | E601 | < 0.5 | < 0.5 | 0.56 | < 0.5 | 1 | <1 | <0.5 | 62 | < 0.5 | 2 | <0.5 |
| | | | | | | | | | | | | | |
| STU06-E | 08-JUL-08 | E601 | <0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | <0.5 | <0.5 | < 0.5 | < 0.5 | <0.5 |
| STU06-E | 05-AUG-08 | E601 | <0.5 | <0.5 | < 0.5 | < 0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TFA-W ^{cd} | | | | | | | | | | | | | |
| W-404 | 16-JUL-08 | E601 | <0.5 | <0.5 | 1.7 | <0.5 | 2.4 | <1 | <0.5 | 9.7 | <0.5 | <0.5 | <0.5 |
| W-404 W-404 | 11-AUG-08 | E601 | <0.5 <0.5 | <0.5 <0.5 | 1.7 | <0.5 <0.5 | 2.4 | <1 | <0.5 <0.5 | 9.7 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 |
| VV-404 | 11-400-00 | L001 | ~ 0.5 | \0.5 | 1.0 | \0. 3 | 2.0 | \ 1 | ₹0.5 | 9.5 | ₹0.5 | \0.5 | < 0.5 |
| TFA-W-E | 16-JUL-08 | E624 | <1 | <1 | 1.7 | <1 | 2.4 | <1 | <1 | 9.5 | <1 | <0.5 | <1 |
| | | | | | | | | | | | | | |
| TFB | | | | | | | | | | | | | |
| TFB-I002 | 01-JUL-08 | E601 | <0.5 | 1.7 | <0.5 | < 0.5 | 1.6 | <1 | 3.1 | 1.1 | <0.5 | 6.5 | <0.5 |
| TFB-I002 | 04-AUG-08 | E601 | <0.5 | 1.6 | <0.5 | < 0.5 | 1.4 | <1 | 2.5 | 0.91 | <0.5 | 5 | <0.5 |
| TFB-I002 | 03-SEP-08 | E601 | <0.5 | 1.7 | <0.5 | <0.5 | 1.5 | <1 | 2.6 | 1 | <0.5 | 5.9 | <0.5 |
| TFB-E002 | 01-JUL-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TFB-E002 | 04-AUG-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TFB-E002 | 03-SEP-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | | | | | | | | | | | | | |
| TFC | | | | | | | | | | | | | |
| TFC-I003 | 02-JUL-08 | E601 | <0.5 | 1.4 | <0.5 | < 0.5 | 1.1 | <1 | 11 | 6 | < 0.5 | 15 | <0.5 |
| TFC-I003 | 04-AUG-08 | E601 | <0.5 | 1.3 | <0.5 | < 0.5 | 1.1 | <1 | 12 | 6.1 | <0.5 | 15 | <0.5 |
| TFC-I003 | 03-SEP-08 | E601 | <0.5 | 1.4 | <0.5 | < 0.5 | 1.2 | <1 | 13 | 6.1 | < 0.5 | 17 | <0.5 |
| TFC-E003 | 02-JUL-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TFC-E003 | 02-JUL-08 04-AUG-08 | E601 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 | <1 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 |
| TFC-E003 | 04-AUG-08 03-SEP-08 | E601 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 | <1 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 | <0.5 <0.5 |
| 11-0-E003 | 03-3EF-00 | LUU I | ₹0.5 | <0.5 | <0.5 | ₹0.5 | ₹0.5 | <u> </u> | ₹0.5 | <∪.5 | ₹0.5 | <0.5 | <∪.5 |

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

| Sample Station | Date Sampled | Analytic Method | CCI ₄ | CHCI ₃ | 1,1-DCA | 1,2-DCA | 1,1-DCE | 1,2-DCE | Freon 113 | PCE | 1,1,1-TCA | TCE | Freon 11 |
|----------------------|-----------------|--------------------|------------------|-------------------|---------|---------|------------|---------|-----------|-------|-----------|-------|----------|
| | _ | | <- | - | - | - | ug/L (ppb) | - | - | - | - | - | -> |
| TFC-E ^e | | | | | | | | | | | | | |
| TFC-SE ^f | | | | | | | | | | | | | |
| TFD ^g | | | | | | | | | | | | | |
| TFD-I004 | 07-JUL-08 | E601 | 1.9 | 2.3 | <0.5 | <0.5 | 0.7 | <1 | <0.5 | 0.93 | <0.5 | 44 | 26 |
| TFD-E004 | 07-JUL-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TFD-E | | | | | | | | | | | | | |
| PTU8-I | 07-JUL-08 | E601 | 5.8 | 1.8 | 0.55 | 1.4 | 9.9 | <1 | 0.71 | 8.1 | < 0.5 | 120 | 1.6 |
| PTU8-I | 05-AUG-08 | E601 | 6.2 | 1.7 | 0.53 | 1.4 | 11 | <1 | 8.0 | 8.3 | < 0.5 | 110 | 1.7 |
| PTU8-I | 08-SEP-08 | E601 | 5.3 | 1.7 | <0.5 | 1.2 | 8.6 | <1 | 0.68 | 8 | <0.5 | 110 | 2 |
| PTU8-E | 07-JUL-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PTU8-E | 05-AUG-08 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <0.5 |
| PTU8-E | 08-SEP-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | < 0.5 | <0.5 | <0.5 |
| TFD-HPD ^h | | | | | | | | | | | | | |
| TFD-S | | | | | | | | | | | | | |
| PTU2-I | 22-JUL-08 | E601 | 3.6 | 1.5 | < 0.5 | < 0.5 | 9.2 | <1 | 2 | 6.3 | < 0.5 | 170 | 0.64 |
| PTU2-I | 22-AUG-08 | E601 | 4.2 | 1.6 | < 0.5 | < 0.5 | 11 | <1 | 2 | 6.4 | < 0.5 | 200 | 0.82 |
| PTU2-I | 24-SEP-08 | E601 | 5.6 | 2 | 0.54 | <0.5 | 16 | <1 | 2.7 | 7.6 | <0.5 | 240 | 1.1 |
| PTU2-E | 22-JUL-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PTU2-E | 22-AUG-08 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <0.5 |
| PTU2-E | 24-SEP-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | < 0.5 | <0.5 | <0.5 |
| TFD-SE | | | | | | | | | | | | | |
| PTU11-I | 02-JUL-08 | E601 | 1.2 | 6 | 1.4 | 5 | 30 | <1 | 1.3 | 100 | < 0.5 | 220 | <0.5 |
| PTU11-I | 05-AUG-08 | E601 | 0.72 | 1.4 | 1.7 | 5.7 | 30 | <1 | < 0.5 | 100 | < 0.5 | 150 | <0.5 |
| PTU11-I | 08-SEP-08 | E601 | 0.91 | 1.5 | 1.9 | 6.4 | 40 | <1 | <0.5 | 99 | <0.5 | 230 | <0.5 |
| PTU11-E | 02-JUL-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PTU11-E | 05-AUG-08 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | < 0.5 | <0.5 | < 0.5 | <0.5 |
| PTU11-E | 08-SEP-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

| Sample Station | Date Sampled | Analytic Method | CCI ₄ | CHCl ₃ | 1.1-DCA | 1.2-DCA | 1,1-DCE | 1.2-DCF | Freon 113 | PCE | 1,1,1-TCA | TCE | Freon 11 |
|---------------------|-----------------|--------------------|------------------|-------------------|---------|---------|------------|---------|-----------|-------|-----------|-------|----------|
| | Campica | Motriou | <- | - | - | - | ug/L (ppb) | - | - | - | - | - | -> |
| TFD-SS | | | | | | | | | | | | | |
| PTU12-I | 16-JUL-08 | E601 | 2.6 | 3.3 | <0.5 | 1.4 | 8.3 | <1 | 0.98 | 22 | <0.5 | 100 | 2.9 |
| PTU12-I | 08-AUG-08 | E601 | 2.7 | 3.2 | < 0.5 | 1.5 | 9.9 | <1 | 1.1 | 22 | < 0.5 | 120 | 3.8 |
| PTU12-I | 10-SEP-08 | E601 | 2.8 | 3 | <0.5 | 1.4 | 9.3 | <1 | 1 | 22 | <0.5 | 110 | 5.8 |
| PTU12-E | 16-JUL-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PTU12-E | 08-AUG-08 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <0.5 |
| PTU12-E | 10-SEP-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TFD-W | | | | | | | | | | | | | |
| PTU6-I | 15-JUL-08 | E601 | 0.55 | 4.4 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | < 0.5 | < 0.5 | 6.9 | 89 |
| PTU6-I | 08-AUG-08 | E601 | 0.6 | 3.7 | < 0.5 | < 0.5 | <0.5 | <1 | 0.58 | < 0.5 | < 0.5 | 7.8 | 98 |
| PTU6-I | 24-SEP-08 | E601 | 0.67 | 3.7 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | 9 | 100 |
| PTU6-E | 15-JUL-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PTU6-E | 08-AUG-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | < 0.5 | <0.5 | < 0.5 | <0.5 |
| PTU6-E | 24-SEP-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TFE-E ⁱ | | | | | | | | | | | | | |
| TFE-HS ^j | | | | | | | | | | | | | |
| TFE-NW | | | | | | | | | | | | | |
| PTU9-I | 15-JUL-08 | E601 | <0.5 | 1.3 | <0.5 | <0.5 | <0.5 | <1 | 0.99 | <0.5 | <0.5 | 11 | <0.5 |
| PTU9-I | 08-AUG-08 | E601 | 0.54 | 1.2 | <0.5 | <0.5 | <0.5 | <1 | 0.9 | <0.5 | <0.5 | 12 | <0.5 |
| PTU9-I | 10-SEP-08 | E601 | 0.56 | 1.2 | <0.5 | <0.5 | <0.5 | <1 | 0.91 | <0.5 | <0.5 | 12 | <0.5 |
| PTU9-E | 15-JUL-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PTU9-E | 08-AUG-08 | E601 | <0.5 | <0.5 | <0.5 | < 0.5 | <0.5 | <1 | <0.5 | < 0.5 | <0.5 | < 0.5 | <0.5 |
| PTU9-E | 10-SEP-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TFE-SE ^k | | | | | | | | | | | | | |
| TFE-SW | | | | | | | | | | | | | |
| MTU03-I | 14-JUL-08 | E601 | 3.3 | 2.5 | <0.5 | <0.5 | 3.7 | 3.7 | 1.3 | 3.6 | <0.5 | 95 | <0.5 |
| MTU03-I | 07-AUG-08 | E601 | 3.1 | 2.5 | < 0.5 | 0.51 | 4 | 3.9 | 1.5 | 3.8 | <0.5 | 100 | <0.5 |
| MTU03-I | 10-SEP-08 | E601 | 7.8 | 4.9 | <0.5 | 1.3 | 6.5 | 5.8 | 0.73 | 7.3 | <0.5 | 190 | <0.5 |
| MTU03-E | 14-JUL-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| MTU03-E | 07-AUG-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

| Sample Station | Date Sampled | Analytic Method | CCI ₄ | CHCI ₃ | 1,1-DCA - | 1,2-DCA - | 1,1-DCE ug/L (ppb) | 1,2-DCE - | Freon 113 | PCE - | 1,1,1-TCA - | TCE - | Freon 11 |
|-----------------------|-----------------|--------------------|------------------|-------------------|--------------|--------------|-----------------------|--------------|-----------|----------|----------------|----------|----------|
| TFE-SW (cont.) | | | | | | | <u> </u> | | | | | | |
| MTU03-E | 10-SEP-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TFE-W | | | | | | | | | | | | | |
| MTU05-I | 16-JUL-08 | E601 | < 0.5 | 1.1 | < 0.5 | < 0.5 | 2.5 | 1.4 | 17 | 6.4 | < 0.5 | 35 | 0.61 |
| MTU05-I | 07-AUG-08 | E601 | < 0.5 | 1.1 | < 0.5 | < 0.5 | 2.8 | 1.5 | 19 | 6.7 | < 0.5 | 35 | 0.64 |
| MTU05-I | 10-SEP-08 | E601 | <0.5 | 1.1 | < 0.5 | <0.5 | 2.8 | 1.7 | 18 | 6 | <0.5 | 33 | 0.63 |
| MTU05-E | 16-JUL-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| MTU05-E | 07-AUG-08 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <0.5 |
| MTU05-E | 10-SEP-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TFG-1 | | | | | | | | | | | | | |
| W-1111 | 15-JUL-08 | E601 | 3 | 10 | < 0.5 | < 0.5 | 1.1 | <1 | <0.5 | 1.4 | < 0.5 | 4.3 | <0.5 |
| GTU01-I | 08-AUG-08 | E601 | 3 | 10 | < 0.5 | < 0.5 | 1.3 | <1 | 0.53 | 1.3 | < 0.5 | 4 | < 0.5 |
| GTU01-I | 10-SEP-08 | E601 | 3 | 11 | <0.5 | <0.5 | 1.2 | <1 | 0.5 | 1.4 | <0.5 | 4.1 | <0.5 |
| GTU01-E | 15-JUL-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU01-E | 08-AUG-08 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| GTU01-E | 10-SEP-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TFG-N ^I | | | | | | | | | | | | | |
| TF406 ^m | | | | | | | | | | | | | |
| TF406-NW ⁿ | | | | | | | | | | | | | |
| TF518-N° | | | | | | | | | | | | | |
| TF5475-1 ^p | | | | | | | | | | | | | |
| TF5475-2 ^q | | | | | | | | | | | | | |
| TF5475-3 ^r | | | | | | | | | | | | | |

Notes on following page.

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Notes:

CCl₄ = Carbon tetrachloride

 $CHCl_3 = Chloroform$

1.1-DCA = 1.1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

NA = not analyzed

Numbers in **BOLD** print indicate positive values above the detection limit.

^a TFA did not operate during part of August and for the entire month of September due to multiple electronic control issues.

^b TFA-E did not operate in September due to possible electronic issues. (An evaluation is pending).

^c TFA-W was shut down in January after a year-long treatability test.

^d W-404 is operational only during routine sample collection.

^e TFC-E did not operate during reporting period due to the budget reduction.

fTFC-SE did not operate during reporting period due to discharge pump issues which will be investigated and repaired as manpower and priorities allow.

⁹ TFD was shut down during August and September for required maintenance. (A pre-start review will be conducted prior to restarting facility).

 $^{^{\}rm h}\, {\rm TFD\text{-}HPD}$ did not operate during reporting period due to the budget reduction.

¹ TFE-E did not operate during reporting period due to a pending electronics evaluation to identify problem areas.

^j TFE-HS did not operate during reporting period due to insufficient resources to repair pump.

k TFE-SE did not operate during reporting period due to insufficient resources to replace pump. (The facility is the first priority for pump replacement).

¹TFG-N did not operate during reporting period due to a pending electronics evaluation to identify needed repairs.

^m TF406 did not operate during reporting period due to insuffcient resources to replace pump. (The facility is the second priority for pump replacement).

ⁿ TF406-NW did not operate during reporting period due to pump failure and insufficient resources to repair. (The facility is the third priority for pump replacement).

 $^{^{\}rm o}$ TF518-N did not operate during reporting period due to the budget reduction.

^p TF5475-1 did not operate during reporting period due to the budget reduction.

^q TF5475-2 did not operate during reporting period due to the budget reduction.

^r TF5475-3 did not operate during reporting period due to the budget reduction.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

| Extraction Well | Date Sampled | Analytic Method | CCI₄ | CHCl ₃ | 1,1-DCA | 1,2-DCA | 1,1-DCE | 1,2-DCE | Freon 113 | PCE | 1,1,1-TCA | TCE | Freon 11 |
|---------------------|-----------------|--------------------|-----------------|-------------------|---------|----------|------------|---------|-----------|-------|-----------|-------|----------|
| | • | | <- ⁻ | - | - | - | ug/L (ppb) | - | - | - | - | - | -> |
| TFA | | | | | | | | | | | | | |
| W-109 ^a | 24-APR-08 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | 0.51 | 2 | < 0.5 | < 0.5 | < 0.5 |
| W-262 ^a | 29-JAN-08 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | 0.56 | < 0.5 | < 0.5 | < 0.5 |
| W-408 ^a | 24-APR-08 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | 0.78 | < 0.5 | < 0.5 | < 0.5 |
| W-415 ^a | 24-APR-08 | E601 | < 0.5 | 1.2 | 0.84 | < 0.5 | 1.8 | <1 | < 0.5 | 14 | < 0.5 | 1.2 | < 0.5 |
| W-457 ^a | 24-APR-08 | E601 | < 0.5 | < 0.5 | 0.84 | < 0.5 | 1.1 | <1 | < 0.5 | 8 | < 0.5 | < 0.5 | < 0.5 |
| W-518 ^a | 24-APR-08 | E601 | < 0.5 | < 0.5 | 7.3 | < 0.5 | 4 | <1 | < 0.5 | 6.3 | < 0.5 | 0.67 | < 0.5 |
| W-520 ^a | 14-JAN-04 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | 1.2 | < 0.5 | < 0.5 | < 0.5 |
| W-522 ^a | 24-APR-08 | E601 | < 0.5 | < 0.5 | 2.3 | < 0.5 | 1.5 | <1 | < 0.5 | 3.5 | < 0.5 | < 0.5 | < 0.5 |
| W-601 ^a | 18-OCT-07 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | 1.3 | < 0.5 | < 0.5 | < 0.5 |
| W-602 ^a | 14-JAN-04 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | 1.4 | < 0.5 | < 0.5 | < 0.5 |
| W-603 ^a | 15-JAN-02 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | <0.5 | 0.64 | < 0.5 | < 0.5 | < 0.5 |
| W-605 ^a | 24-APR-08 | E601 | < 0.5 | 0.83 | 0.92 | < 0.5 | 1.4 | <1 | <0.5 | 22 | < 0.5 | 1.1 | < 0.5 |
| W-609 ^a | 14-JAN-04 | E601 | < 0.5 | < 0.5 | 0.92 | < 0.5 | < 0.5 | <1 | <0.5 | 0.65 | < 0.5 | < 0.5 | < 0.5 |
| W-614 ^a | 24-APR-08 | E601 | < 0.5 | 0.84 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | 8.2 | < 0.5 | < 0.5 | < 0.5 |
| W-712 ^a | 24-APR-08 | E601 | 3.2 | 3 | 1.2 | < 0.5 | 3.7 | <1 | <0.5 | 1.6 | < 0.5 | 3.6 | < 0.5 |
| W-714 ^a | 06-MAY-08 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | 8.4 | < 0.5 | < 0.5 | < 0.5 |
| W-903 ^a | 29-JAN-08 | E601 | < 0.5 | < 0.5 | 1.8 | < 0.5 | 1.4 | <1 | < 0.5 | 7.5 | < 0.5 | 0.52 | < 0.5 |
| W-904 ^a | 24-APR-08 | E601 | < 0.5 | < 0.5 | 0.97 | < 0.5 | 1.5 | <1 | < 0.5 | 9.1 | < 0.5 | 0.53 | < 0.5 |
| W-1001 ^a | 24-APR-08 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| W-1004 ^a | 24-APR-08 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | 4.2 | < 0.5 | < 0.5 | < 0.5 |
| W-1009 ^a | 24-APR-08 | E601 | 1.4 | 5.9 | 0.94 | <0.5 | 4 | <1 | 0.71 | 13 | <0.5 | 2.3 | <0.5 |
| TFA-E | | | | | | | | | | | | | |
| W-254 | 08-JUL-08 | E601 | <0.5 | <0.5 | 0.61 | <0.5 | 0.97 | <1 | <0.5 | 65 | <0.5 | 1.7 | <0.5 |
| TFA-W | | | | | | | | | | | | | |
| W-404 | 11-AUG-08 | E601 | <0.5 | <0.5 | 1.8 | <0.5 | 2.8 | <1 | <0.5 | 9.3 | <0.5 | <0.5 | <0.5 |
| TFB | | | | | | | | | | | | | |
| W-357 | 01-JUL-08 | E601 | 1.6 | 2.8 | < 0.5 | < 0.5 | 1.7 | <1 | 6.7 | 1.5 | < 0.5 | 42 | < 0.5 |
| W-610 | 01-JUL-08 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 2.1 | <1 | 3 | 1 | < 0.5 | 2.7 | < 0.5 |
| W-620 | 01-JUL-08 | E601 | < 0.5 | 1.6 | < 0.5 | < 0.5 | 2.4 | <1 | 4 | 2.1 | < 0.5 | 7.7 | < 0.5 |
| W-621 | 01-JUL-08 | E601 | < 0.5 | 0.6 | < 0.5 | < 0.5 | 0.58 | <1 | 1.5 | 0.5 | < 0.5 | 4.9 | < 0.5 |
| W-655 | 01-JUL-08 | E601 | < 0.5 | 0.68 | < 0.5 | < 0.5 | < 0.5 | <1 | 3.5 | < 0.5 | <0.5 | 2.7 | < 0.5 |
| W-704 | 01-JUL-08 | E601 | 0.7 | 3 | < 0.5 | < 0.5 | 2 | <1 | 5.9 | 3.7 | < 0.5 | 26 | < 0.5 |
| W-1423 | 01-JUL-08 | E601 | 0.75 | 4.6 | < 0.5 | < 0.5 | 3.5 | <1 | 4.7 | 2.1 | < 0.5 | 10 | < 0.5 |

Table A-2. VOC analyses of samples from treatment facility extraction wells.

| Extraction Well | Date Sampled | Analytic Method | CCI₄ | CHCI ₃ | 1.1-DCA | 1.2-DCA | 1,1-DCE | 1.2-DCF | Freon 113 | PCE | 1,1,1-TCA | TCE | Freon 1 |
|----------------------|-----------------|--------------------|-------|-------------------|--------------|---------|------------|------------|-----------|-------|-----------|------|---------|
| Well | Campica | Wethou | <- | - | | - | ug/L (ppb) | - | - | - | - | - | -> |
| TFC | | | | | | | | | | | | | |
| W-701 | 02-JUL-08 | E601 | < 0.5 | 2.6 | < 0.5 | < 0.5 | 2.4 | <1 | 30 | 0.5 | < 0.5 | 10 | < 0.5 |
| W-1015 | 02-JUL-08 | E601 | < 0.5 | 0.73 | < 0.5 | < 0.5 | 1 | <1 | 1.9 | 1.2 | < 0.5 | 4.8 | < 0.5 |
| W-1102 | 02-JUL-08 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 0.63 | <1 | 7.6 | < 0.5 | < 0.5 | 2.6 | < 0.5 |
| W-1103 | 02-JUL-08 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | < 0.5 | < 0.5 | 1.8 | < 0.5 |
| W-1104 | 02-JUL-08 | E601 | < 0.5 | 0.91 | < 0.5 | < 0.5 | 0.58 | <1 | 4.1 | 12 | < 0.5 | 23 | < 0.5 |
| W-1116 | 02-JUL-08 | E601 | <0.5 | 1.6 | <0.5 | <0.5 | 0.55 | <1 | 5.9 | 2.8 | <0.5 | 3.9 | <0.5 |
| TFC-E ^b | | | | | | | | | | | | | |
| W-368 ^a | 08-JAN-08 | E601 | <0.5 | 11 | <0.5 | < 0.5 | 0.82 | <1 | 18 | 2.3 | <0.5 | 16 | 3.7 |
| W-413 ^a | 08-JAN-08 | E601 | <0.5 | 15 | <0.5 | <0.5 | 1.2 | <1 | 11 | <0.5 | < 0.5 | 8.1 | 3.7 |
| TFC-SE ^b | | | | | | | | | | | | | |
| W-1213 ^a | 08-APR-08 | E601 | <0.5 | 4.4 | <0.5 | <0.5 | 2.7 | <1 | 6.4 | <0.5 | <0.5 | 15 | <0.5 |
| W-2201 ^a | 08-APR-08 | E601 | <0.5 | 9.5 | <0.5 <0.5 | <0.5 | 2.4 | <1 | 15 | 0.69 | <0.5 | 19 | 1.2 |
| VV-2201 | 00-AF H-00 | E00 I | <0.5 | 9.5 | <0.5 | <0.5 | 2.4 | \ 1 | 13 | 0.09 | <0.5 | 19 | 1.2 |
| TFD | | | | | | | | | | | | | |
| W-351 ^a | 03-APR-08 | E601 | 5.3 | 1.1 | <0.5 | 0.99 | 3.9 | <1 | 1.2 | 5.4 | <0.5 | 99 | 1.3 |
| W-653 | 07-JUL-08 | E601 | 40 | 12 | <0.5 | <0.5 | 1.5 | <1 | 5.3 | 1.5 | <0.5 | 1400 | <0.5 |
| W-906 ^a | 03-APR-08 | E601 | 0.81 | 1.6 | < 0.5 | < 0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | 3.4 | 1.9 |
| W-907-2 | 07-JUL-08 | E601 | 0.99 | 3.2 | < 0.5 | <0.5 | 1.3 | <1 | <0.5 | 1.7 | <0.5 | 29 | <0.5 |
| W-1206 | 07-JUL-08 | E601 | 0.87 | 1.6 | < 0.5 | <0.5 | 0.66 | <1 | < 0.5 | 0.52 | <0.5 | 19 | <0.5 |
| W-1208 | 07-JUL-08 | E601 | 3.1 | 2.2 | < 0.5 | <0.5 | 0.6 | <1 | 0.63 | 0.93 | <0.5 | 64 | 53 |
| W-2011 ^a | 04-APR-07 | E601 | 3.1 | 2.2 | < 0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | 77 | <0.5 |
| W-2101 ^a | 04-APR-07 | E601 | 17 | 5.2 | < 0.5 | <0.5 | 0.68 | <1 | 2.7 | 0.83 | <0.5 | 450 | <0.5 |
| W-2102 ^a | 04-APR-07 | E601 | 28 | 9.7 | <0.5 | <0.5 | 0.74 | <1 | 3.6 | 0.77 | <0.5 | 840 | 1.8 |
| TFD-E | | | | | | | | | | | | | |
| W-1253 ^{ac} | 11-FEB-08 | E601 | 6 | 6.2 | <5 | <5 | 16 | <10 | 17 | 12 | <5 | 2300 | <5 |
| W-1255 ^a | 11-FEB-08 | E601 | 4.4 | 2 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | < 0.5 | < 0.5 | 260 | < 0.5 |
| W-1301 | 07-JUL-08 | E601 | 4.6 | 2.8 | 3.1 | 9.8 | 69 | 1.1 | 0.57 | 44 | < 0.5 | 440 | < 0.5 |
| W-1303 | 07-JUL-08 | E601 | 3.1 | 2.9 | 0.68 | 2.6 | 6.4 | <1 | < 0.5 | 6.4 | < 0.5 | 150 | 22 |
| W-1306 | 07-JUL-08 | E601 | 6.1 | 2.2 | < 0.5 | < 0.5 | 0.56 | <1 | 0.62 | 2.2 | <0.5 | 130 | < 0.5 |
| W-1307 | 07-JUL-08 | E601 | 1.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | < 0.5 | < 0.5 | 18 | < 0.5 |
| W-1404 | 07-JUL-08 | E601 | < 0.5 | 1.5 | 1.1 | 11 | 7.7 | 1.3 | < 0.5 | 67 | < 0.5 | 100 | < 0.5 |
| W-1550 | 07-JUL-08 | E601 | 15 | 4 | < 0.5 | < 0.5 | 2.7 | <1 | 1.4 | 10 | <0.5 | 180 | < 0.5 |
| W-2006 | 07-JUL-08 | E601 | 1.6 | 3.1 | 4.2 | 14 | 120 | 2.2 | < 0.5 | 100 | <0.5 | 940 | < 0.5 |
| W-2203 | 07-JUL-08 | E601 | 18 | 2.8 | < 0.5 | < 0.5 | 3.9 | <1 | 3.5 | 9.2 | < 0.5 | 160 | < 0.5 |

Table A-2. VOC analyses of samples from treatment facility extraction wells.

| Extraction | Date | Analytic | | | | | | | | | | | |
|--------------------------|-----------|----------|------------------|-------------------|---------|---------|-----------------------|---------|-----------|----------|-----------|----------|----------------|
| Well | Sampled | Method | CCI ₄ | CHCI ₃ | 1,1-DCA | 1,2-DCA | 1,1-DCE ug/L (ppb) | 1,2-DCE | Freon 113 | PCE - | 1,1,1-TCA | TCE - | Freon 11 -> |
| | | | <u> </u> | | | | ug/L (ppb) | | | | | | |
| TFD-HPD ^b | | | | | | | | | | | | | |
| W-1254 ^a | 04-OCT-07 | E601 | 0.88 | <0.5 | <0.5 | < 0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | 14 | <0.5 |
| W-1551 ^a | 04-OCT-07 | E601 | 11 | 4.4 | < 0.5 | <0.5 | 1.6 | <1 | 3 | 3.1 | <0.5 | 210 | < 0.5 |
| W-1552 ^a | 20-DEC-07 | E601 | < 0.5 | 0.96 | < 0.5 | < 0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | 22 | < 0.5 |
| W-1650 ^a | 20-DEC-07 | E601 | 7.1 | 1.8 | <0.5 | < 0.5 | < 0.5 | <1 | 2.6 | < 0.5 | <0.5 | 260 | < 0.5 |
| W-1651 ^a | 20-DEC-07 | E601 | 1.3 | 1.1 | <0.5 | < 0.5 | < 0.5 | <1 | 0.61 | < 0.5 | <0.5 | 64 | < 0.5 |
| W-1652 ^a | 18-DEC-07 | E601 | 3 | 2 | <0.5 | < 0.5 | < 0.5 | 3.7 | 1 | 0.54 | <0.5 | 420 | < 0.5 |
| W-1653 ^a | 18-DEC-07 | E601 | 1.4 | 0.9 | <0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | < 0.5 | <0.5 | 74 | < 0.5 |
| W-1654 ^a | 18-DEC-07 | E601 | < 0.5 | 0.55 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | < 0.5 | < 0.5 | 25 | < 0.5 |
| W-1655 ^a | 18-DEC-07 | E601 | 0.62 | 0.94 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | 1 | < 0.5 | 49 | < 0.5 |
| W-1656 ^a | 18-DEC-07 | E601 | 2.5 | 0.97 | < 0.5 | < 0.5 | < 0.5 | <1 | 0.88 | < 0.5 | < 0.5 | 100 | < 0.5 |
| W-1657 ^a | 18-DEC-07 | E601 | 12 | 5.1 | <0.5 | <0.5 | <0.5 | <1 | 4.2 | 0.52 | <0.5 | 1200 | <0.5 |
| TFD-S | | | | | | | | | | | | | |
| W-1503 | 22-JUL-08 | E601 | 4.7 | 1.9 | < 0.5 | < 0.5 | 10 | <1 | 2 | 3.8 | < 0.5 | 190 | 0.9 |
| W-1504 | 22-JUL-08 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 14 | <1 | 3.8 | 22 | < 0.5 | 79 | < 0.5 |
| W-1510 | 22-JUL-08 | E601 | <0.5 | <0.5 | < 0.5 | <0.5 | 1.7 | <1 | 0.5 | 3.7 | <0.5 | 23 | <0.5 |
| TFD-SE | | | | | | | | | | | | | |
| W-314 ^a | 07-JAN-08 | E601 | 1.6 | 8.9 | 0.72 | 1.7 | 11 | <1 | 5 | 21 | < 0.5 | 170 | < 0.5 |
| W-1308 | 02-JUL-08 | E601 | 0.51 | 1.2 | 1.6 | 5.1 | 21 | <1 | < 0.5 | 110 | < 0.5 | 130 | < 0.5 |
| W-1403 | 02-JUL-08 | E601 | 2.9 | 19 | 1.5 | 6.6 | 51 | <1 | 3.9 | 98 | < 0.5 | 430 | < 0.5 |
| W-1904 ^a | 26-DEC-07 | E601 | < 0.5 | < 0.5 | 0.54 | 0.67 | 5.8 | <1 | < 0.5 | 39 | < 0.5 | 42 | < 0.5 |
| W-2005 | 02-JUL-08 | E601 | 1.2 | 1 | 0.59 | 1.2 | 23 | <1 | < 0.5 | 49 | <0.5 | 97 | < 0.5 |
| SIP-ETC-201 ^a | 26-DEC-07 | E601 | <0.5 | 0.55 | 0.59 | 1.1 | 8.5 | <1 | <0.5 | 59 | <0.5 | 60 | <0.5 |
| TFD-SS | | | | | | | | | | | | | |
| W-1523 | 16-JUL-08 | E601 | 4 | 4.4 | < 0.5 | 1.8 | 11 | <1 | 1.4 | 24 | < 0.5 | 160 | < 0.5 |
| W-1601 | 16-JUL-08 | E601 | 3.8 | 3.9 | 1.7 | 6.5 | 25 | 1.2 | 1.2 | 94 | < 0.5 | 260 | < 0.5 |
| W-1602 | 16-JUL-08 | E601 | < 0.5 | 1.4 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | 0.72 | < 0.5 | 11 | 8 |
| W-1603 ^a | 11-APR-08 | E601 | 1.6 | 2 | 1.2 | 4.8 | 16 | 1.2 | <0.5 | 33 | <0.5 | 170 | 8.6 |
| TFD-W | | | | | | | | | | | | | |
| W-1215 | 15-JUL-08 | E601 | < 0.5 | 6.5 | <0.5 | < 0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | 5.6 | 34 |
| W-1216 | 15-JUL-08 | E601 | <0.5 | 4.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | 5.5 | 60 |
| W-1902 | 15-JUL-08 | E601 | 0.69 | 3.4 | <0.5 | <0.5 | <0.5 | <1 | 0.65 | <0.5 | <0.5 | 8.3 | 89 |
| TFE-E ^b | | | | | | | | | | | | | |
| W-566 ^a | 09-APR-08 | E601 | 0.71 | 6.7 | <0.5 | < 0.5 | 3.5 | <1 | 9.4 | 4.4 | <0.5 | 58 | < 0.5 |
| W-1109 ^a | 09-APR-08 | E601 | <0.5 | 0.58 | 0.51 | <0.5 | 43 | <1 | 7.9 | 71 | <0.5 | 200 | <0.5 |

Table A-2. VOC analyses of samples from treatment facility extraction wells.

| Extraction Well | Date Sampled | Analytic Method | CCI ₄ | CHCI ₃ | 1,1-DCA - | 1,2-DCA - | 1,1-DCE ug/L (ppb) | 1,2-DCE - | Freon 113 | PCE - | 1,1,1-TCA - | TCE - | Freon 11 |
|-----------------------|-----------------|--------------------|------------------|-------------------|--------------|--------------|-----------------------|--------------|-----------|----------|----------------|----------|----------|
| TFE-E (cont.) | | | | | | | | | | | | | |
| W-1903 ^a | 30-JUL-07 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 23 | <1 | 11 | 21 | < 0.5 | 36 | < 0.5 |
| W-1909 ^a | 30-JUL-07 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 35 | <1 | 10 | 48 | < 0.5 | 58 | < 0.5 |
| W-2305 ^a | 30-JUL-07 | E601 | <0.5 | 1.1 | 1.5 | <0.5 | 99 | <1 | 21 | 170 | <0.5 | 380 | <0.5 |
| TFE-HS ^b | | | | | | | | | | | | | |
| W-2012 ^a | 09-APR-08 | E601 | 1.9 | 1.8 | <0.5 | <0.5 | 9 | 2.9 | 7.9 | 15 | <0.5 | 260 | <0.5 |
| W-2105 ^a | 09-APR-08 | E601 | <0.5 | 1.4 | <0.5 | <0.5 | 3.2 | 1.4 | 4.4 | 14 | <0.5 | 440 | <0.5 |
| TFE-NW | | | | | | | | | | | | | |
| W-1211 | 15-JUL-08 | E601 | 0.5 | 1.3 | <0.5 | <0.5 | <0.5 | <1 | 1 | <0.5 | <0.5 | 12 | <0.5 |
| W-1409 ^a | 10-APR-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | 1.2 | <1 | 0.57 | 1.7 | <0.5 | 30 | <0.5 |
| TFE-SE ^b | | | | | | | | | | | | | |
| W-359 ^a | 09-JAN-08 | E601 | 4.1 | 0.69 | <0.5 | <0.5 | 10 | <1 | 9.3 | 8.7 | <0.5 | 100 | 0.91 |
| TFE-SW | | | | | | | | | | | | | |
| W-1518 | 14-JUL-08 | E601 | <0.5 | 0.6 | <0.5 | < 0.5 | 1.9 | 2.2 | 1.9 | 1.1 | <0.5 | 17 | <0.5 |
| W-1520 ^a | 09-JAN-08 | E601 | 7.4 | 5.2 | <0.5 | 1.3 | 1.7 | 2.3 | <0.5 | 5.2 | <0.5 | 130 | <0.5 |
| W-1522 | 14-JUL-08 | E601 | 7.9 | 5 | <0.5 | 1.2 | 6.1 | 6 | 0.71 | 7 | <0.5 | 200 | <0.5 |
| TFE-W | | | | | | | | | | | | | |
| W-292 | 16-JUL-08 | E601 | < 0.5 | 0.85 | < 0.5 | < 0.5 | 1 | 3 | 1.6 | 1.4 | < 0.5 | 25 | < 0.5 |
| W-305 | 16-JUL-08 | E601 | <0.5 | 1.3 | <0.5 | <0.5 | 3.6 | <1 | 28 | 9.5 | <0.5 | 43 | 1 |
| TFG-1 | | | | | | | | | | | | | |
| W-1111 | 15-JUL-08 | E601 | 3 | 10 | <0.5 | <0.5 | 1.1 | <1 | <0.5 | 1.4 | <0.5 | 4.3 | <0.5 |
| TFG-N ^b | | | | | | | | | | | | | |
| W-1806 ^a | 09-APR-08 | E601 | <0.5 | 2.4 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | 12 | <0.5 | 2.4 | <0.5 |
| W-1807 ^a | 10-APR-08 | E601 | <0.5 | 2 | <0.5 | <0.5 | 1.5 | <1 | 1.5 | 16 | <0.5 | 5.4 | <0.5 |
| TF406 ^b | | | | | | | | | | | | | |
| W-1309 ^a | 12-MAY-08 | E601 | <0.5 | < 0.5 | <0.5 | < 0.5 | < 0.5 | <1 | <0.5 | <0.5 | <0.5 | 6.5 | <0.5 |
| W-1310 ^a | 29-JAN-08 | E601 | <0.5 | 0.86 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | 7.2 | <0.5 |
| GSW-445 ^a | 12-MAY-08 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | 2.5 | <0.5 |
| | | | | | | | | | | | | | |
| TF406-NW ^b | | | | | | | | | | | | | |

Table A-2. VOC analyses of samples from treatment facility extraction wells.

| Extraction Well | Date Sampled | Analytic Method | CCI ₄ | CHCI ₃ | 1,1-DCA | 1,2-DCA | 1,1-DCE | | Freon 113 | PCE | 1,1,1-TCA | TCE | Freon 11 |
|--------------------------|-----------------|--------------------|------------------|-------------------|---------|---------|------------|-----|-----------|------|-----------|-------|----------|
| | | | <- | - | - | - | ug/L (ppb) | - | - | - | - | - | -> |
| TF518-N ^b | | | | | | | | | | | | | |
| W-1410 ^a | 23-JAN-08 | E601 | 2.8 | 1.5 | <0.5 | <0.5 | <0.5 | <1 | <0.5 | 0.83 | <0.5 | 18 | <0.5 |
| TF518-PZ ^d | | | | | | | | | | | | | |
| W-1615 ^a | 07-FEB-08 | E601 | 0.58 | 0.84 | < 0.5 | < 0.5 | 3 | <1 | < 0.5 | 42 | <0.5 | 130 | <0.5 |
| W-518-1913 ^a | 07-FEB-08 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 7.5 | <1 | < 0.5 | 18 | < 0.5 | 34 | < 0.5 |
| W-518-1914 ^a | 07-FEB-08 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | 20 | < 0.5 | 5.6 | < 0.5 |
| W-518-1915 ^{ac} | 07-FEB-08 | E601 | <25 | <25 | <25 | <25 | 180 | <50 | <25 | 1500 | <25 | 12000 | <25 |
| SVB-518-201 ^a | 07-FEB-08 | E601 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | <1 | < 0.5 | 35 | < 0.5 | 8.5 | < 0.5 |
| SVB-518-204 ^a | 07-FEB-08 | E601 | <0.5 | 0.63 | <0.5 | <0.5 | 1.4 | <1 | <0.5 | 43 | <0.5 | 550 | <0.5 |
| TF5475-1 ^b | | | | | | | | | | | | | |
| W-1302-2 ^a | 18-JUL-07 | E601 | 1.8 | 19 | 0.73 | 3.4 | 20 | <1 | 7.4 | 41 | <0.5 | 260 | <0.5 |
| TF5475-2 ^b | | | | | | | | | | | | | |
| W-1108 ^a | 16-JAN-08 | E601 | 2 | 39 | 0.79 | 3.1 | 18 | <1 | 5.9 | 45 | <0.5 | 440 | <0.5 |
| W-1415 ^a | 16-JAN-08 | E601 | 0.71 | 3.9 | <0.5 | <0.5 | 8.4 | <1 | 2.1 | 9.8 | <0.5 | 76 | <0.5 |
| TF5475-3 ^b | | | | | | | | | | | | | |
| W-1604 ^a | 21-AUG-07 | E601 | 2.9 | 29 | 0.94 | 5.2 | 23 | <1 | 17 | 45 | <0.5 | 390 | <0.5 |
| W-1605 ^a | 21-AUG-07 | E601 | 1.3 | 13 | <0.5 | 5.7 | 7.2 | 1.2 | 4 | 21 | <0.5 | 210 | <0.5 |
| W-1608 ^a | 21-AUG-07 | E601 | <0.5 | 9.5 | 0.71 | 3.2 | 2.1 | 3.2 | 1.8 | 7.1 | <0.5 | 69 | <0.5 |
| W-1609 ^a | 21-AUG-07 | E601 | <0.5 | 13 | 0.55 | 9.4 | 2.7 | <1 | 0.94 | 7.9 | <0.5 | 62 | <0.5 |

Notes on following page.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Notes:

CCl₄ = Carbon tetrachloride

 $CHCl_3 = Chloroform$

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

NA = not analyzed

Numbers in **BOLD** print indicate positive values above the detection limit.

^a Most recent VOC sample results available.

^b Treatment Facility did not operate during reporting period. Please refer to Table A-1 for details.

^c Elevated detection limit due to dilution.

^d No ground water was extracted from TF518-PZ wells during reporting period.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

| Extraction Well | Date Sampled | Analytic Method | CCI ₄ | CHCI ₃ | 1,1-DCA | 1,2-DCA | 1,1-DCE PPM(V/V) | 1,2-DCE | Freon 113 | PCE - | 1,1,1-TCA | TCE - | Freon 11 |
|---|------------------------|--------------------|------------------|-------------------|----------|---------|---------------------|----------|------------------------|----------|-----------|----------------|----------|
| | | | | | | | FFIVI(V/V) | | | | | | |
| VTFD-ETCS ^a | | | | | | | | | | | | | |
| W-1904 ^b | 26-JUN-07 | TO15DI | < 0.02 | < 0.02 | < 0.02 | < 0.02 | 0.12 | < 0.02 | <0.02 | 2.2 | <0.02 | 0.64 | <0.02 |
| W-ETC-2003 ^b | 12-JUL-07 | TO15DI | <0.008 | <0.008 | <0.008 | <0.008 | 0.022 | <0.008 | <0.008 | 1.1 | <0.008 | 0.26 | <0.008 |
| W-ETC-2004A ^b | 12-JUL-07 | TO15DI | <0.01 | <0.01 | <0.01 | <0.01 | 0.021 | <0.01 | <0.01 | 1.6 | <0.01 | 0.5 | <0.01 |
| W-ETC-2004B ^b | 12-JUL-07 | TO15DI | < 0.02 | < 0.02 | < 0.02 | < 0.02 | 0.18 | < 0.02 | < 0.02 | 3.3 | <0.02 | 1.7 | <0.02 |
| SIP-ETC-201 ^b | 12-JUL-07 | TO15DI | <0.01 | <0.01 | 0.023 | <0.01 | 0.054 | <0.01 | <0.01 | 1.6 | <0.01 | 8.0 | <0.01 |
| VTFD-HPD ^c | | | | | | | | | | | | | |
| W-1552 ^b | 13-FEB-07 | TO15DI | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | 0.011 | <0.005 | 0.2 | <0.005 |
| W-1650 ^b | 03-JUL-07 | TO15DI | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| W-1651 ^b | 03-JUL-07 | TO15DI | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| W-1652 ^b | 03-JUL-07 | TO15DI | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| W-1653 ^b | 03-JUL-07 | TO15DI | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| W-1654 ^b | 03-JUL-07 | TO15DI | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| W-1655 ^b | 03-JUL-07 | TO15DI | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| W-1656 ^b | 03-JUL-07 | TO15DI | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 |
| W-1657 ^b | 03-JUL-07 | TO15DI | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | <0.005 |
| W-HPA-002B ^b | 03-JUL-07 | TO15DI | 0.032 | 0.024 | < 0.0057 | <0.0057 | 0.011 | <0.0057 | <0.0057 | 0.1 | <0.0057 | 1 | <0.0057 |
| VTFD-HS ^d | | | | | | | | | | | | | |
| W-653 ^b | 15-FEB-07 | TO15DI | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | < 0.005 | <0.005 | <0.005 | 0.093 | <0.005 |
| W-2011 | 15-FEB-07 15-FEB-07 | TO15DI | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | 0.093 0.081 | <0.005 |
| W-2101 ^b | 15-FEB-07 | TO15DI | <0.005 | <0.005 | <0.005 | < 0.005 | < 0.005 | < 0.005 | <0.005 | <0.005 | <0.005 | 0.061 | <0.005 |
| W-2101 W-2102 ^b | 15-FEB-07 | TO15DI | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | 0.001 | <0.005 |
| VV-2102 | 13-1 LD-07 | 101301 | <0.003 | <0.005 | <0.003 | <0.003 | <0.003 | <0.003 | <0.003 | <0.003 | <0.003 | 0.11 | <0.005 |
| VTFE-ELM ^e | | | | | | | | | | | | | |
| W-1903 ^b | 16-AUG-07 | TO15DI | < 0.0084 | < 0.0084 | < 0.0084 | <0.0084 | 1.4 | < 0.0084 | 0.36 | 1.4 | < 0.0084 | 1.5 | < 0.0084 |
| W-1909 ^b | 16-JUL-07 | TO15DI | < 0.008 | < 0.008 | < 0.008 | <0.008 | 1.2 | <0.008 | 0.36 | 0.04 | < 0.008 | 0.19 | < 0.008 |
| W-2305 ^b | 16-AUG-07 | TO15DI | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.014 | < 0.005 | 0.016 | 0.064 | < 0.005 | 0.069 | <0.005 |
| W-543-001 ^b | 05-FEB-08 | TO15DI | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.0096 | < 0.005 | < 0.005 | 0.13 | < 0.005 | 0.038 | < 0.005 |
| W-543-003 ^b | 05-FEB-08 | TO15DI | < 0.005 | 0.0069 | <0.005 | < 0.005 | 0.052 | < 0.005 | 0.012 | 0.11 | < 0.005 | 0.29 | < 0.005 |
| W-543-1908 ^b | 05-FEB-08 | TO15DI | < 0.005 | <0.005 | <0.005 | < 0.005 | < 0.005 | < 0.005 | <0.005 | 0.015 | < 0.005 | 0.023 | <0.005 |
| VTFE-HS ^f | | | | | | | | | | | | | |
| W-ETS-2008A,b | 30-JAN-08 | TO15DI | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | < 0.005 | 0.031 | <0.005 | 0.057 | <0.005 |
| W-ETS-2008A W-ETS-2008B | 05-FEB-08 | TO15DI | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 0.015 | 0.031 | <0.005 | 0.057 | <0.005 |
| W-E1S-2008b W-ETS-2009 ^b | 30-JAN-08 | TO15DI | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | < 0.015 | 0.14 | <0.005 | 0.4 0.092 | <0.005 |
| W-ETS-2009 W-ETS-2010A | 30-JAN-08 | TO15DI | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | 0.062 | <0.005 | 0.092 | <0.005 |
| W-ETS-2010A W-ETS-2010B ^b | 30-JAN-08 | TO15DI | <0.005 | <0.005 | <0.005 | <0.005 | 0.003 | 0.0054 | 0.058 | 0.040 | <0.005 | 1 | <0.005 |
| W-2105 ^b | 30-JAN-08 | TO15DI | <0.005 | <0.005 | <0.005 | <0.005 | 0.014 | < 0.005 | 0.01 | 0.022 | <0.005 | 0.13 | <0.005 |
| = | 20 0 00 | | 10.000 | 10.000 | 10.000 | -0.000 | | 10.000 | | | -0.000 | | -0.000 |

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

| | traction Well | Date Sampled | Analytic Method | CCI ₄ | CHCI ₃ | 1,1-DCA - | 1,2-DCA - | 1,1-DCE PPM(V/V) | 1,2-DCE - | Freon 113 | PCE - | 1,1,1-TCA - | TCE - | Freon 11 |
|--------|--------------------------------|-----------------|--------------------|------------------|-------------------|--------------|--------------|---------------------|--------------|-----------|-------------|----------------|----------|----------|
| VTI | F406-ḤS ^g | | | | | | | | | | | | | |
| | <i>N</i> -217 ^b | 26-JUN-08 | TO15DI | 0.33 | 0.037 | 0.015 | < 0.005 | 2 | 0.013 | 0.38 | 2.9 | <0.005 | 2.8 | < 0.005 |
| W-5 | 14-2007A ^b | 26-JUN-08 | TO15DI | 0.018 | <0.005 | <0.005 | < 0.005 | 0.012 | < 0.005 | 0.01 | 0.066 | < 0.005 | 0.37 | 0.19 |
| W-5 | 14-2007B ^b | 26-JUN-08 | TO15DI | 0.11 | 0.018 | 0.0096 | <0.005 | 1 | 0.01 | 0.082 | 1.4 | < 0.005 | 2.7 | 0.016 |
| V | TF511 ^h | | | | | | | | | | | | | |
| v | N-274 ^b | 04-OCT-06 | TO15DI | 0.14 | 0.02 | <0.0062 | <0.0062 | 0.07 | <0.0062 | 0.014 | 0.33 | < 0.0062 | 6.1 | 0.38 |
| | V-1517 ^b | 20-DEC-07 | TO15DI | 0.0066 | < 0.005 | < 0.005 | < 0.005 | 0.0068 | < 0.005 | < 0.005 | 0.022 | < 0.005 | 0.65 | 0.016 |
| V | V-2204 ^b | 01-AUG-07 | TO15DI | 0.089 | 0.069 | < 0.02 | 0.091 | 0.039 | < 0.02 | < 0.02 | 0.26 | < 0.02 | 3.4 | <0.02 |
| V | V-2206 ^b | 01-AUG-07 | TO15DI | 0.024 | 0.057 | < 0.02 | 0.25 | < 0.02 | < 0.02 | < 0.02 | 0.27 | < 0.02 | 2.9 | < 0.02 |
| W | /-2207A ^b | 26-FEB-08 | TO15DI | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.0066 | < 0.005 | < 0.005 | 0.0064 | < 0.005 | 1.9 | < 0.005 |
| W | '-2207B | 07-AUG-08 | TO15DI | 0.032 | 0.023 | < 0.0062 | < 0.0062 | 0.083 | < 0.0062 | < 0.0062 | 0.044 | < 0.0062 | 4.2 | < 0.0062 |
| W | ′-2208A ^b | 26-FEB-08 | TO15DI | 0.18 | 0.047 | < 0.02 | < 0.02 | 0.37 | < 0.02 | 0.032 | 0.11 | < 0.02 | 15 | 0.75 |
| W | '-2208B | 07-AUG-08 | TO15DI | 0.56 | 0.18 | 0.17 | < 0.072 | 3.6 | 0.11 | 0.19 | 1.8 | < 0.072 | 58 | 0.19 |
| V | V-2205 ^b | 01-AUG-07 | TO15DI | 0.087 | 0.14 | <0.031 | 0.035 | 0.056 | <0.031 | <0.031 | 0.19 | < 0.031 | 5.5 | <0.031 |
| VTI | F518-PZ ⁱ | | | | | | | | | | | | | |
| \ \ | V-1615 ^b | 15-JAN-08 | TO15DI | 0.1 | <0.025 | <0.025 | < 0.025 | 0.96 | <0.025 | 0.96 | 8.7 | < 0.025 | 17 | <0.025 |
| W-5 | 518-1913 ^b | 15-JAN-08 | TO15DI | 0.012 | 0.006 | 0.007 | < 0.005 | 1.7 | < 0.005 | 0.063 | 2 | < 0.005 | 4.5 | < 0.005 |
| W-5 | 518-1914 ^b | 15-JAN-08 | TO15DI | < 0.005 | < 0.005 | < 0.005 | < 0.005 | <0.005 | < 0.005 | < 0.005 | 0.98 | < 0.005 | 0.28 | < 0.005 |
| W-5 | 518-1915 ^b | 15-JAN-08 | TO15DI | < 0.0066 | < 0.0066 | < 0.0066 | < 0.0066 | 0.29 | < 0.0066 | 0.01 | 1.6 | < 0.0066 | 5.9 | < 0.0066 |
| SVB | 3-518-201 ^b | 15-JAN-08 | TO15DI | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.016 | < 0.005 | < 0.005 | 3.9 | < 0.005 | 0.34 | < 0.005 |
| SVB | 3-518-204 ^b | 15-JAN-08 | TO15DI | < 0.02 | < 0.02 | < 0.02 | < 0.02 | 0.051 | < 0.02 | <0.02 | 2.4 | < 0.02 | 15 | < 0.02 |
| V | TF5475 ^j | | | | | | | | | | | | | |
| | ETS-507 ^b | 06-SEP-07 | TO15DI | <0.005 | 0.85 | <0.005 | 0.62 | <0.005 | <0.005 | <0.005 | 0.15 | <0.005 | 0.67 | <0.005 |
| ۷۷-۱ | V-1605, ^b | 06-SEP-07 | TO15DI | 0.0069 | 0.03 | <0.005 | 0.02 | 0.11 | <0.005 | 0.036 | 0.13 | <0.005 | 0.85 | <0.005 |
| ٧٠ | V-1603 V-1608, ^b | 06-SEP-07 | TO15DI | < 0.005 | < 0.005 | <0.005 | < 0.005 | < 0.005 | <0.005 | < 0.005 | <0.005 | <0.005 | 0.0061 | <0.005 |
| ١٨ | V-1008 V-2211 ^b | 12-OCT-07 | TO15DI | <0.005 | 0.49 | 0.003 | 0.15 | 0.14 | <0.005 | 0.003 | 0.11 | <0.005 | 1.2 | <0.005 |
| \v | V-2212 ^b | 12-OCT-07 | TO15DI | 0.056 | 0.75 | 0.012 | 0.039 | 1.1 | <0.005 | 0.16 | 0.66 | <0.005 | 3.8 | <0.005 |
| ٧٨ | V-2212 V-2302 ^b | 05-OCT-07 | TO15DI | 0.032 | 0.47 | 0.024 | < 0.017 | 0.73 | <0.003 | 0.063 | 0.86 | <0.003 | 11 | <0.003 |
| W | V-2303 ^b | 05-OCT-07 | TO15DI | 0.009 | 0.88 | 0.038 | 0.083 | 0.4 | < 0.005 | 0.0088 | 0.36 | < 0.005 | 3.7 | <0.005 |
| SVI- | -ETS-504 ^b | 12-OCT-07 | TO15DI | < 0.005 | 0.32 | 0.0052 | 0.14 | 0.073 | < 0.005 | < 0.005 | 0.064 | < 0.005 | 0.34 | < 0.005 |

Notes on following page.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

^a VTFD-ETCS did not operate during reporting period due to the budget reduction.

Notes:

 CCl_4 = Carbon tetrachloride

 $CHCl_3 = Chloroform$

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

NA = not analyzed

Numbers in **BOLD** print indicate positive values above the detection limit.

^b Most recent VOC vapor sample results available.

^c VTFD-HPD did not operate during reporting period due to the budget reduction.

 $^{^{\}rm d}$ VTFD-HS did not operate during reporting period due to the budget reduction.

^e VTFE-ELM did not operate during reporting period due to the budget reduction.

^f VTFE-HS did not operate during reporting period due to the budget reduction.

⁹ VTF406-HS did not operate during reporting period due to recent flow totals being suspect.

^h VTF511 failed early August due to electronic operating system issues which will be investigated and repaired as manpower and priorities allow.

VTF518-PZ did not operate during reporting period due to the budget reduction.

^j VTF5475 did not operate during reporting period due to the budget reduction.

Table A-4. Chromium analyses of influent, effluent and receiving water samples by treatment facility.

| Treatment | Sample | Date | Chromium (total) ^a | Hexavalent Chromium |
|-----------|----------|-----------|-------------------------------|---------------------|
| Facility | Station | Sampled | mg/L (ppm) | mg/L (ppm) |
| TFA | TFA-I001 | 01-JUL-08 | 0.011 | 0.012 |
| | TFA-E001 | 01-JUL-08 | 0.012 | 0.012 |
| TFA-E | W-254 | 08-JUL-08 | 0.0056 | NA |
| | STU06-E | 08-JUL-08 | 0.0088 | NA |
| TFB | TFB-I002 | 01-JUL-08 | 0.016 | NA |
| | TFB-E002 | 01-JUL-08 | 0.018 | NA |
| | TFB-E002 | 04-AUG-08 | 0.02 | NA |
| | TFB-E002 | 03-SEP-08 | 0.02 | NA |
| | TFB-R002 | 01-JUL-08 | 0.017 | NA |
| TFC | TFC-I003 | 02-JUL-08 | 0.024 | NA |
| | TFC-E003 | 02-JUL-08 | 0.022 | NA |
| | TFC-E003 | 04-AUG-08 | 0.024 | NA |
| | TFC-E003 | 03-SEP-08 | 0.024 | NA |
| | TFC-R003 | 02-JUL-08 | 0.0069 | NA |
| TFD | TFD-I004 | 07-JUL-08 | 0.013 | NA |
| | TFD-E004 | 07-JUL-08 | 0.013 | NA |
| TFD-E | PTU8-I | 07-JUL-08 | 0.0066 | NA |
| | PTU8-E | 07-JUL-08 | 0.0065 | NA |
| TFD-S | PTU2-I | 22-JUL-08 | 0.008 | NA |
| | PTU2-E | 22-JUL-08 | 0.0093 | NA |
| TFD-SE | PTU11-I | 02-JUL-08 | 0.015 | NA |
| | PTU11-E | 02-JUL-08 | 0.015 | NA |
| TFD-SS | PTU12-I | 16-JUL-08 | 0.012 | NA |
| | PTU12-E | 16-JUL-08 | 0.012 | NA |
| TFD-W | PTU6-I | 15-JUL-08 | 0.014 | NA |
| | PTU6-E | 15-JUL-08 | 0.015 | NA |
| TFE-NW | PTU9-I | 15-JUL-08 | 0.0099 | NA |
| | PTU9-E | 15-JUL-08 | 0.0097 | NA |
| TFE-SW | MTU03-I | 14-JUL-08 | 0.0051 | NA |
| | MTU03-E | 14-JUL-08 | 0.0057 | NA |
| TFE-W | MTU05-I | 16-JUL-08 | 0.0098 | NA |
| | MTU05-E | 16-JUL-08 | 0.0095 | NA |
| TFG-1 | GTU01-I | 15-JUL-08 | 0.0082 | NA |
| | GTU01-E | 15-JUL-08 | 0.0072 | NA |

^aA discharge limit of 0.050 ppm is set for total chromium during the dry season (April 1-November 30), and no limit is set for total chromium for the wet season (December 1-March 31); however, a limit of 0.022 ppm hexavalent chromium applies during the wet season. Discharge limits are defined in the Explanation of Significant Differences for metals discharge limits (April 1997).

Shaded values exceeded the discharge limit. See text for explanation.

Table A-5. Bioassay, turbidity, and chloride analyses of influent and effluent samples by treatment facility.

| Treatment Facility | Sample Station | Date Sampled | Aquatic Bioassay ^a Percent Survival | Turbidity Nephelometric Turbidity Units (NTU) | Chloride (mg/L) |
|-----------------------|-------------------|-----------------|--|---|--------------------|
| TFA | TFA-I001 | 01-JUL-08 | NA | NA | 83 |
| TFA | TFA-E001 | 01-JUL-08 | 100 (100) | 0.2 | 82 |
| TFA-E | STU06-E | 08-JUL-08 | 100 (100) | NA | NA |
| TFB | TFB-E002 | 01-JUL-08 | 100 (100) | NA | NA |
| TFC | TFC-E003 | 02-JUL-08 | 100 (100) | NA | NA |
| TFD | TFD-E004 | 07-JUL-08 | 100 (100) | NA | NA |
| TFD-E | PTU8-E | 07-JUL-08 | 100 (100) | NA | NA |
| TFD-S | PTU2-E | 22-JUL-08 | 100 (100) | NA | NA |
| TFD-SE | PTU11-E | 02-JUL-08 | 100 (100) | NA | NA |
| TFD-SS | PTU12-E | 16-JUL-08 | 100 (100) | NA | NA |
| TFD-W | PTU6-E | 15-JUL-08 | 100 (100) | NA | NA |
| TFE-NW | PTU9-E | 15-JUL-08 | 100 (100) | NA | NA |
| TFE-SW | MTU03-E | 14-JUL-08 | 100 (100) | NA | NA |
| | MTU03-E | 15-JUL-08 | 100 (100) | NA | NA |
| TFE-W | MTU05-E | 16-JUL-08 | 100 (100) | NA | NA |
| TFG-1 | GTU01-E | 15-JUL-08 | 100 (100) | NA | NA |

^aTest species was Fathead minnow and the test duration was 96 hours. Percent survival in the control group samples shown in parentheses.

Note: NA = not applicable

Explanation of Abbreviations

TFA-I001 is a sampling port located immediately prior to the TFA Treatment System.

TFA-E001 is a sampling port located immediately after the TFA Treatment System, at the beginning of the discharge pipeline.

TFA receiving water is routinely sampled at the TFG-ASW location.

TFA-W-I is an influent sampling port prior to the sediment bag filter immediately following W-404.

TFA-W-E is an effluent sampling port immediately following the sediment bag filter; the water is then discharged to the Livermore Water Reclamation Plant (LWRP).

TFB-I002 is a sampling port located immediately prior to the TFB Treatment System.

TFB-E002 is a sampling port located immediately after the TFB Treatment System, at the beginning of the discharge pipeline.

TFB-R002 is a sampling station in the drainage ditch north of TFB, located approximately 75 ft downstream from the discharge point.

TFC-I003 is a sampling port located immediately prior to the TFC Treatment System.

TFC-E003 is a sampling port located immediately after the TFC Treatment System, at the beginning of the discharge pipeline.

TFC-R003 is a sampling station in Arroyo Las Positas, located approximately 75 ft downstream from the TFC discharge point.

TFD-l004 is a sampling port located immediately prior to the TFD Treatment System.

TFD-E004 is a sampling port located immediately after the TFD Treatment System, prior to discharge to the Drainage Retention Basin or to the underground discharge pipeline leading to Arroyo Las Positas.

TFD-R004 is now combined with and collected at the TFC-R003 location. Results are reported under TFC-R003, as approved by the RWOCB.

CRD1-I is a sampling port located immediately prior to the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1).

CRD1-E is the effluent from the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1) and then reinjected at W-1302.

CRD2-I is a sampling port located immediately prior to the catalytic columns in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2).

CRD2-E is the effluent from the last catalytic column in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2) and then reinjected at W-1610.

GTU01-I is a sampling port located immediately prior to GTU01, which is currently operating in the TFG-1 area.

GTU01-E is a sampling port located immediately after GTU01, which is currently operating in the TFG-1 area.

GTU01 receiving water is routinely sampled at the TFG-ASW location.

GTU03-I is a sampling port located immediately prior to GTU03, which is currently operating in the TF406 Northwest area.

GTU03-E is a sampling port located immediately after GTU03, which is currently operating in the TF406 Northwest area.

GTU03 receiving water is routinely sampled at the TFC-R003 location.

GTU07-I is a sampling port located immediately prior to GTU07, which is currently operating in the TFE Hotspot area.

GTU07-E is a sampling port located immediately after GTU07, which is currently operating in the TFE Hotspot area.

GTU07 receiving water is routinely sampled at the TFC-R003 location.

GTU09-I is a sampling port located immediately prior to GTU09, which is currently operating in the TF5475 area.

GTU09-E is a sampling port located immediately after GTU09, which is currently operating in the TF5475 area.

GTU09 receiving water is routinely sampled at the TFC-R003 location.

MTU02-I is a sampling port located immediately prior to MTU02, which is currently operating in the TFG North area.

MTU02-E is a sampling port located immediately after MTU02, which is currently operating in the TFG North area.

MTU02 receiving water is routinely sampled at the TFC-R003 location.

MTU03-I is a sampling port located immediately prior to MTU03, which is currently operating in the TFE Southwest area.

MTU03-E is a sampling port located immediately after MTU03, which is currently operating in the TFE Southwest area.

MTU03 receiving water is routinely sampled at the TFC-R003 location.

MTU04-I is a sampling port located immediately prior to MTU04, which is currently operating in the TFE Southeast area.

MTU04-E is a sampling port located immediately after MTU04, which is currently operating in the TFE Southeast area.

MTU04 receiving water is routinely sampled at the TFC-R003 location.

MTU05-I is a sampling port located immediately prior to MTU05, which is currently operating in the TFE West area.

MTU05-E is a sampling port located immediately after MTU05, which is currently operating in the TFE West area.

Explanation of Abbreviations

MTU05 receiving water is routinely sampled at the TFC-R003 location.

MTU1-I is a sampling port located immediately prior to MTU1, which is currently operating in the TFC East area.

MTU1-E is a sampling port located immediately after MTU1, which is currently operating in the TFC East area.

MTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU1-I is a sampling port located immediately prior to PTU-1, which is currently operating in the TFC Southeast area.

PTU1-E is a sampling port located immediately after PTU-1, which is currently operating in the TFC Southeast area.

PTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU2-I is a sampling port located immediately prior to PTU-2, which is currently operating in the TFD South area.

PTU2-E is a sampling port located immediately after PTU-2, which is currently operating in the TFD South area.

PTU2 receiving water is routinely sampled at TFC-R003 during the wet season.

PTU3-I is a sampling port located immediately prior to PTU-3, which is currently operating in the TFE East area.

PTU3-E is a sampling port located immediately after PTU-3, which is currently operating in the TFE East area.

PTU3 receiving water is routinely sampled at the TFC-R003 location.

PTU5-I is a sampling port located immediately prior to PTU-5, which is currently operating in the TF406 extraction location.

PTU5-E is a sampling port located immediately after PTU-5, which is currently operating in the TF406 extraction location.

PTU5 receiving water is routinely sampled at the TFC-R003 location.

PTU6-I is a sampling port located immediately prior to PTU-6, which is currently operating in the TFD West area.

PTU6-E is a sampling port located immediately after PTU-6, which is currently operating in the TFD West area.

PTU6 receiving water is routinely sampled at the TFC-R003 location.

PTU8-I is a sampling port located immediately prior to PTU-8, which is currently operating in the TFD East area.

PTU8-E is a sampling port located immediately after PTU-8, which is currently operating in the TFD East area.

PTU8 receiving water is routinely sampled at the TFC-R003 location.

PTU9-I is a sampling port located immediately prior to PTU-9, which is currently operating in the TFE Northwest area.

PTU9-E is a sampling port located immediately after PTU-9, which is currently operating in the TFE Northwest area.

PTU9 receiving water is routinely sampled at the TFC-R003 location.

PTU10-I is a sampling port located immediately prior to PTU-10, which is currently operating in the TFD Helipad area.

PTU10-E is a sampling port located immediately after PTU-10, which is currently operating in the TFD Helipad area.

PTU10 receiving water is routinely sampled at the TFC-R003 location.

PTU11-I is a sampling port located immediately prior to PTU-11, which is currently operating in the TFD Southeast area.

PTU11-E is a sampling port located immediately after PTU-11, which is currently operating in the TFD Southeast area.

PTU11 receiving water is routinely sampled at the TFC-R003 location.

PTU12-I is a sampling port located immediately prior to PTU-12, which is currently operating in the TFD Southshore area.

PTU12-E is a sampling port located immediately after PTU-12, which is currently operating in the TFD Southshore area.

PTU12 receiving water is routinely sampled at the TFC-R003 location.

STU06-I is a sampling port located immediately prior to STU06, which is operating in the TFA East area.

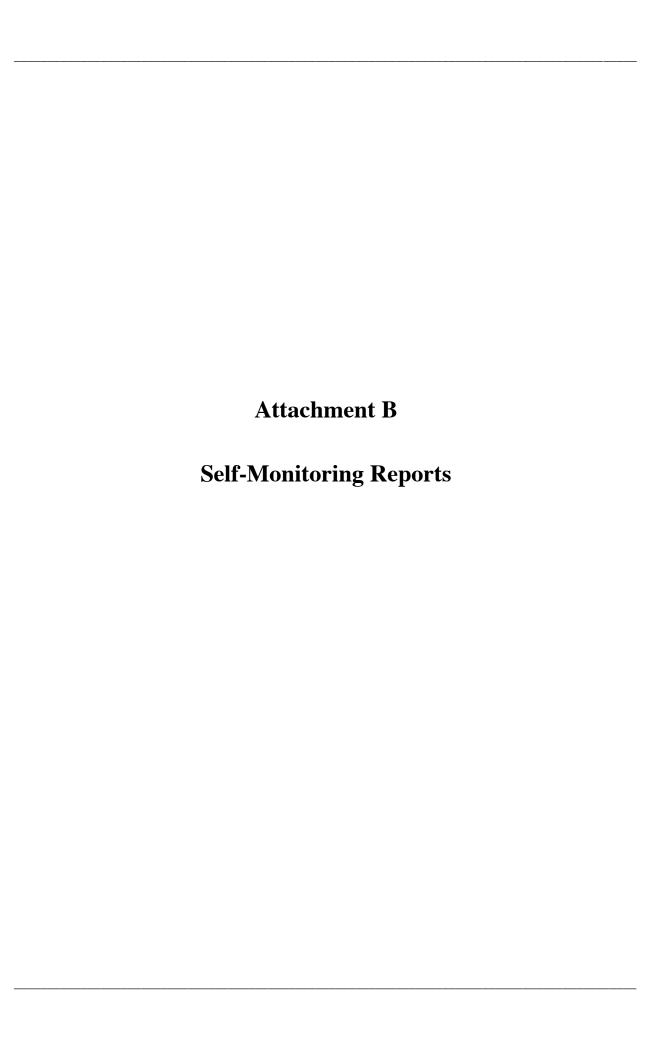
STU06-E is a sampling port located immediately after STU06, which is operating in the TFA East area.

STU06 receiving water is routinely sampled at the TFG-ASW location.

STU09-I is a sampling port located immediately prior to STU09, which is currently operating in the TF518-North area.

STU09-E is a sampling port located immediately after STU09, which is currently operating in the TF518-North area.

STU09 receiving water is routinely sampled at the TFC-R003 location.



Self-Monitoring Report LLNL Treatment Facility A (TFA) AREA TFA

- 1. Reporting Period: Business Month July Year 2008
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

July <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 </u>

Total monthly time facility operated (hours): 401

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):

Influent pH:

Effluent pH:

Effluent Temperature (°C):

07-01-2008

7.5

19.2

4. Wellfield Data:

| | Monthly | Instantaneous |
|--------|-------------|----------------|
| Source | Volume(gal) | Flow Rate(gpm) |
| W-408 | 0 | 0.0 |
| W-109 | 702,700 | 33.3 |
| W-457 | 147,100 | 7.7 |
| W-522 | 0 | 0.0 |
| W-602 | 0 | 0.0 |
| | | 0.0 |
| W-614 | 106 200 | |
| W-712 | 196,300 | 8.3 |
| W-714 | 158,900 | 7.2 |
| W-904 | 579,400 | 30.9 |
| W-415 | 0 | 0.0 |
| W-518 | 0 | 0.0 |
| W-601 | 0 | 0.0 |
| W-603 | 0 | 0.0 |
| W-520 | 0 | 0.0 |
| W-605 | 249,300 | 10.6 |
| W-262 | 0 | 0.0 |
| W-609 | 0 | 0.0 |
| W-903 | 0 | 0.0 |
| W-1004 | 296,900 | 12.6 |
| W-1009 | 597,000 | 25.3 |
| W-1001 | 0 | 0.0 |
| Total: | 2,927,600 | 135.9 |

5. Discharge Information:

Self-Monitoring Report (cont'd) LLNL Treatment Facility A (TFA) AREA TFA

Discharge LocationReceiving
Water StationVolumeWest Perimeter Drainage ChannelTFB-R0021,463,800Arroyo SecoTFG-ASW1,463,800

6. Comments:

Facility secured on 7-10-08 due to flow meter problems. Flow meter problem resolved, and facility restarted on 7-24-08.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 08-01-2008

Self-Monitoring Report LLNL Treatment Facility A (TFA) AREA TFA

1. Reporting Period: Business Month <u>August</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 291

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>08-04-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.5</u> |
| Effluent pH: | <u>7.5</u> |
| Effluent Temperature (°C): | 19.6 |

4. Wellfield Data:

| | Monthly | Instantaneous |
|--------|-------------|----------------|
| Source | Volume(gal) | Flow Rate(gpm) |
| W-408 | 0 | 0.0 |
| W-109 | 571,400 | 33.3 |
| W-457 | 109,300 | 7.5 |
| W-522 | 0 | 0.0 |
| W-614 | 0 | 0.0 |
| W-712 | 137,100 | 8.3 |
| W-714 | 108,200 | 6.5 |
| W-904 | 451,600 | 31.1 |
| W-415 | 0 | 0.0 |
| W-518 | 0 | 0.0 |
| W-605 | 177,400 | 10.4 |
| W-262 | 0 | 0.0 |
| W-903 | 0 | 0.0 |
| W-1004 | 208,400 | 12.7 |
| W-1009 | 414,900 | 24.9 |
| W-1001 | 0 | 0.0 |
| Total: | 2,178,300 | 134.7 |

5. Discharge Information:

| | | Receiving | |
|---------------------------|--------|-----------------|-----------|
| Discharge Location | | Water Station | Volume |
| | | | |
| West Perimeter Drainage C | hannel | TFB-R002 | 1.089.150 |

Self-Monitoring Report (cont'd) LLNL Treatment Facility A (TFA) AREA TFA

Arroyo Seco

TFG-ASW

1,089,150

6. Comments:

Facility went down on 8-11-08 due to control system failure.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 08-29-2008

Self-Monitoring Report LLNL Treatment Facility A (TFA) AREA TFA

- 1. Reporting Period: Business Month September Year 2008
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 30 31 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

| | Monthly | Instantaneous |
|--------|-------------|----------------|
| Source | Volume(gal) | Flow Rate(gpm) |
| W-408 | 0 | 0.0 |
| W-109 | 0 | 0.0 |
| W-457 | 0 | 0.0 |
| W-522 | 0 | 0.0 |
| W-614 | 0 | 0.0 |
| W-712 | 0 | 0.0 |
| W-714 | 0 | 0.0 |
| W-904 | 0 | 0.0 |
| W-415 | 0 | 0.0 |
| W-518 | 0 | 0.0 |
| W-903 | 0 | 0.0 |
| W-605 | 0 | 0.0 |
| W-262 | 0 | 0.0 |
| W-1004 | 0 | 0.0 |
| W-1009 | 0 | 0.0 |
| W-1001 | 0 | 0.0 |
| Total: | <u>0</u> | 0.0 |

5. Discharge Information:

<u>Discharge Location</u> <u>Water Station</u> <u>Volume</u>

West Perimeter Drainage Channel

TFB-R002

Receiving

<u>0</u>

Self-Monitoring Report (cont'd) LLNL Treatment Facility A (TFA) **AREA TFA**

Arroyo Seco

TFG-ASW

_0

6. Comments:

This treatment facility was shut down on 8-11-08 due to a problem with the facility control system. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct. Date: 10-09-2008

Operator Signature: _

Self-Monitoring Report LLNL Solar Treatment Unit 06 (STU06) AREA TFA-E

| 1. Reporting Period: | : Business Mon | th <u>July</u> | Year <u>200</u> | <u>)8</u> | | | |
|--|---|---|-------------------------------|---|----------------------|----------------|----------------|
| 2. Dates (in bold ar | nd <u>underline</u>) | treated grou | nd water | was disc | harged | <u>.</u> | |
| July <u>01</u> <u>16</u> | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $\frac{05}{20} \frac{06}{21} \frac{07}{22}$ | $\frac{08}{23} \frac{09}{24}$ | $\frac{10}{25}$ $\frac{11}{26}$ | 1 12 5 27 | 13 14 28 29 | 15 30 31 |
| Total monthly to | ime facility ope | erated (hours |): <u>344</u> | | | | |
| 3. Monthly Complia | ince Data: | | | | | | • |
| Date complianc Influent pH: Effluent pH: Effluent Tempe | | formed (m/d | /y): <u>0</u> ′ | 7-08-200 <u>7</u> <u>7</u> <u>23</u> | 08 .0 .5 .4 | | |
| 4. Wellfield Data: | | | | | | | |
| Source | Monthly Volume(gal) | Instantaneous Flow Rate | | | | | |
| W-254 | 35,095 | 1 | .7 | | | | |
| Total: | 35,095 | 1 | .7 | - | | | |
| 5. Discharge Inform | ation: | | n. | | | | |
| Discharge Loc | cation | | | ceiving ater Stat | ion | Volur | <u>ne</u> |
| Arroyo Sec | <u>o</u> | | | ΓFG-AS | \mathbf{W} | _35,0 | <u>95</u> |
| 6. Comments: | | | | | | | |
| 7. I certify that the in Operator Signature: | nformation in the | nis report, to | | | | ge, is true | |

Self-Monitoring Report LLNL Solar Treatment Unit 06 (STU06) AREA TFA-E

| | | nth <u>August</u> Y | eai <u>2006</u> | |
|------------------------------|---|--|---|---|
| 2. Dates (in bold | and <u>underline</u>) | treated ground wa | ter was discharged | l . |
| August | 01 02 03 04 16 17 18 19 | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $\frac{13}{28} \frac{14}{29} \frac{15}{29}$ |
| Total monthly | y time facility ope | erated (hours): | 293 | |
| 3. Monthly Comp | liance Data: | | | |
| Influent pH: Effluent pH: | nce sampling per | formed (m/d/y): | $ \begin{array}{r} \underline{08-05-2008} \\ \underline{7.0} \\ \underline{7.5} \\ \underline{19.9} \end{array} $ | |
| 4. Wellfield Data: | | | | |
| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) | | |
| W-254 | 28,885 | 1.7 | | |
| | | | | |
| Total: | 28,885 | <u>1.7</u> | | |
| Total: 5. Discharge Infor | | <u>1.7</u> | Doggiving | |
| | rmation: | <u>1.7</u> | Receiving Water Station | <u>Volume</u> |
| 5. Discharge Infor | rmation: | <u>1.7</u> | _ | <u>Volume</u> |
| 5. Discharge Infor | rmation: | <u>1.7</u> | Water Station | |

Self-Monitoring Report LLNL Solar Treatment Unit 06 (STU06) AREA TFA-E

| 1. Reporting Per | iod:] | Busi | ness | Mor | nth | Se | ptem | <u>ıber</u> | . Ye | ear <u>20</u> | <u>008</u> | | | | | |
|---|---|--------------|---------------|-----------------|---------------|----------------|---------------|---------------|-----------|---------------|-------------|--------------|----------|----------|-----------|----|
| 2. Dates (in bol | d and | l <u>un</u> | derli | <u>ne</u>) | trea | ted g | roun | ıd wa | iter v | vas d | lisch | argeo | d | | | |
| August September | 30 01 16 | <u>02</u> | 03 18 | <u>04</u> 19 | 05 20 | 06 21 | | | 09 24 | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 30 | |
| Total month | ly tin | ne fa | cilit | у ор | erate | d (ho | ours) | : | <u>14</u> | | | | | | | |
| 3. Monthly Compliance Data: | | | | | | | | | | | | | | | | |
| Date complication influent pH: Effluent pH: Effluent Ten | | | | | form | ned (1 | m/d/y | y): <u>N</u> | ot N | <u>Ieası</u> | <u>ured</u> | | | | | |
| 4. Wellfield Data | a: | | | | | | | | | | | | | | | |
| Source | | Mon Volu | • | gal) | | stanta ow R | | | | | | | | | | |
| W-254 | | | 1,4 | 402 | | | 0.0 |) | | | | | | | | |
| Total: | _ | | 1,4 | <u>402</u> | | | 0.0 |) | 4 | | | | | | | |
| 5. Discharge Info | orma | tion: | | | | | | | Dag | eivii | n G | | | | | |
| Discharge | Loca | ation | : | | | | | | | ter S | _ | <u>n</u> | 7 | /oluı | <u>me</u> | |
| Arroyo | <u>Seco</u> | | | | | | | | <u>T</u> | FG- | ASV | <u>V</u> | | 1,4 | 102 | |
| 6. Comments: Facility do on 9-2-08. 9-4-08. Sy transducer | Syst stem | em v rest | went artec | dow | n on 9-4-(| 9-2- 08. S | 08 d yster | ue to n we | wea | ık ba | ttery | . Ba | ttery | repla | aced c | on |
| 7. I certify that th | 7. I certify that the information in this report, to the best of my knowledge, is true and correct. | | | | | | | | | | | | | | | |
| Operator Signatu | ıre: _ | |) C | u | | Cer | va | gu | 6 | • | Dat | e: <u>09</u> | -30- | 2008 | <u> </u> | |

Self-Monitoring Report LLNL LWRP (LWRP) AREA TFA-W

| 1. Reporting Perio | od: Busine | ss Mon | th <u>Ju</u> | ıly | Year | 200 | <u>8</u> | | | | | | |
|--|----------------------|------------|--------------|-------|-------------|----------|----------------|----------|----------|----------|----------|-----------|-----------|
| 2. Dates (in bold and <u>underline</u>) treated ground water was discharged | | | | | | | | | | | | | |
| • | 01 02 03 16 17 18 | | | | 08 23 | | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 30 | 31 |
| Total monthly | time faci | lity ope | erated (h | ours) |): <u> </u> | <u>0</u> | | | | | | | |
| 3. Monthly Compliance Data: | | | | | | | | | | | | | |
| Date compliance sampling performed (m/d/y): Influent pH: Effluent pH: T.5 Effluent Temperature (°C): 21.5 | | | | | | | | | | | | | |
| 4. Wellfield Data: | | | | | | | | | | | | | |
| Source | Monthl Volume | • | us gpm) | | | | | | | | | | |
| W-404 | | 472 | | 32.4 | 4 | | | | | | | | |
| Total: | | <u>472</u> | | 32.4 | <u>4</u> | | | | | | | | |
| 5. Discharge Infor | mation: | | | | | Das | : : . | | | | | | |
| Discharge L | Location | | | | | | eivii ter S | _ | <u>n</u> | Ž | Volu | <u>me</u> | |
| LWRP @ | 5513Z C | harlott | te Way | | | <u>T</u> | FA- | W-E | | | _4 | 72 | |
| 6. Comments: Operations were suspended on 1/14/08. The pump in well W-404 is turned on only for very limited durations for routine sampling. | | | | | | | | | | | | | |
| 7. I certify that the | e informati | on in tl | ais repoi | t, to | the b | est o | f my | kno | wlec | lge, i | s tru | e and | l correct |
| Operator Signature: Date: 08-04-2008 | | | | | | | | | | | | | |

Self-Monitoring Report LLNL LWRP (LWRP) AREA TFA-W

| 1. Re | porting Per | iod: | Busi | ness | Moı | nth | _ <u>A</u> ı | ıgus | <u>t</u> Y | ear <u>2</u> | 2008 | | | | | | |
|--|---|---|-------------|----------|-------------|-------|--------------|-------|------------|--------------|-------|-----------------|----------|--------|----------|-----------|---------|
| 2. Da | ates (in bol e | d an | d <u>un</u> | derli | ine) | trea | ted g | grour | nd wa | ater v | vas c | lisch | arge | d | | | |
| | August | 01 16 | 02 17 | | | | | | 08 23 | | | <u>11</u> 26 | | | 14 29 | 15 | |
| 7 | Total monthly time facility operated (hours): _0 | | | | | | | | | | | | | | | | |
| 3. M | onthly Com | plia | nce I | Data: | | | | | | | | | | | | | |
| I I | Date compliance sampling performed (m/d/y): $\frac{08-11-2008}{7.5}$ Effluent pH: $\frac{7.5}{7.5}$ Effluent Temperature (°C): $\frac{21.4}{5}$ | | | | | | | | | | | | | | | | |
| 4. W | ellfield Data | a: | | | | | | | | | | | | | | | |
| en. | Source | Monthly Instantaneous Source Volume(gal) Flow Rate(gpm) | | | | | | | | | | | | | | | |
| | W-404 | | | , | 245 | | | 32.5 | 5 | | | | | | | | |
| | Total: | | | 4 | <u> 245</u> | | | 32.5 | 5 | | | | | | | | |
| 5. Di | scharge Info | orma | ation: | | | | | | | Dag | ceivi | na | | | | | |
| | Discharge | Loc | ation | <u>1</u> | | | | | | | | tatio | <u>n</u> | Z | Volu | <u>me</u> | |
| | LWRP | <u>@ 5</u> 5 | 513Z | Ch: | arlot | te W | ay | | | <u>T</u> | FA- | W-E | | | _2 | <u>45</u> | |
| 6. Comments: Operations were suspended on 1/14/08. The pump in well W-404 is turned on only for very limited durations for routine sampling. | | | | | | | | | | | | | | | | | |
| 7. I c | ertify that th | ne in | form | atio | n in t | his r | epor | t, to | the b | est o | of my | kno | wlec | lge, i | s tru | e and | correct |
| Oper | Operator Signature: Date: 09-03-2008 | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

Self-Monitoring Report LLNL LWRP (LWRP) AREA TFA-W

| 1. Reporting Peri | od: | Busi | ness | Mor | nth | Se | ptem | <u>lber</u> | . Ye | ar <u>20</u> | 008 | | | | | |
|--|----------------|--------------------|--------------|-------------|-------|----------------|--------|--------------|----------|-----------------|--------------|-----------|----------|----------|------------|------|
| 2. Dates (in bold | l and | d <u>un</u> | <u>derli</u> | <u>ne</u>) | trea | ted g | roun | d wa | iter v | vas d | lischa | argeo | 1 | | | |
| September | 30 01 16 | | | 04 19 | | 06 21 | | 08 23 | 09 24 | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 30 | |
| Total monthl | y tir | ne fa | cilit | y op | erate | d (ho | ours) | : | <u>0</u> | | | | | | | |
| 3. Monthly Comp | plian | nce I | Data: | | | | | | | | | | | | | |
| Date complia Influent pH: Effluent pH: Effluent Ten | | | | • | form | ned (1 | m/d/ | y): <u>N</u> | lot M | <u>Ieas</u> | <u>ured</u> | ļ | | | | |
| 4. Wellfield Data | 1: | | | | | | | | | | | | | | | |
| Source | | Mon <u>Volu</u> | • | gal) | | stanta ow R | | | <u>1</u> | | | | | | | |
| W-404 | | | | 0 | | | 0.0 | 0 | | | | | | | | |
| Total: | • | | | 0 | | | 0.0 | 0 | | • | | | | | | |
| 5. Discharge Info | orma | ation | : | | | | | | Do | | | | | | | |
| Discharge | Loc | atior | <u>1</u> | | | | | | | ceivi iter S | ng Static | <u>on</u> | 7 | Volu | <u>me</u> | |
| LWRP | <u>@ 5</u> ; | 513Z | Z Ch | arlo | tte V | <u>Vay</u> | | | _1 | FA- | W-E | <u>E</u> | | | _0 | |
| 6. Comments: Operations only for ve 2008 samp | ery li | imite | ed du | ıratic | ons f | or ro | utine | sam | pling | g. Ú | nabl | e to o | | | | |
| 7. I certify that the | ne in | ıforn | natio | n, in | this | repoi | rt, to | the l | oest (| of m | y kno | owle | dge, | is tru | e and corr | ect. |
| Operator Signature: Date: 10-02-2008 | | | | | | | | | | | | | | | | |

Self-Monitoring Report LLNL Treatment Facility B (TFB) AREA TFB

1. Reporting Period: Business Month July Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

July <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 </u>

Total monthly time facility operated (hours): <u>649</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-01-2008
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 20.2

4. Wellfield Data:

| G. | Monthly | Instantaneous |
|--------|-------------|----------------|
| Source | Volume(gal) | Flow Rate(gpm) |
| W-357 | 192,200 | 6.7 |
| W-610 | 194,900 | 5.4 |
| W-621 | 278,600 | 7.6 |
| W-620 | 178,400 | 5.5 |
| W-655 | 247,500 | 7.0 |
| W-704 | 223,800 | 6.8 |
| W-1423 | 243,600 | 6.3 |
| Total: | 1,559,000 | 45.3 |

5. Discharge Information:

Receiving
Water Station
West Perimeter Drainage Channel
TFB-R002
1,559,000

6. Comments:

Facility down on 7-13-08 due to power surge. Restarted on 7-14-08. Facility secured on 7-17-08 to adjust accumulator readings. Accumulator readings corrected and interlock settings entered. Facility restarted on 7-22-08.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-31-2008

Land Observation Report date: TFB-R002 - West Perimeter Drainage Channel

| 1. | Reporting Period: Business Month <u>July</u> Year <u>2008</u> | - | |
|---------------------------------|---|--------------------------|---|
| 2. | Date compliance sampling performed <u>07-01-2008</u> | | |
| 3. | Weather Conditions: | | |
| | Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph): | 18.6 0 5/ SW | |
| 4. | Receiving Data: | | |
| | Sample Location pH Temperature (C) Receiving Water N/M N/M | | |
| 5. | Land Observations, as "Yes" or "No", for reporting r | nonth: | |
| - | Visual Observations | Effluent | Receiving Water |
| Í | Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity | No No Not Required | <u>No</u> <u>No</u> <u>No</u> No |
| | Evidence of Beneficial Water Use | Not Required | <u>No</u> |
| 6. | Evidence of Beneficial Water Use Comments: | Not Required | <u>No</u> |
| 6.7. | | t of my knowledge, | is true and correct. |

Self-Monitoring Report LLNL Treatment Facility B (TFB) AREA TFB

1. Reporting Period: Business Month <u>August</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): <u>705</u>

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>08-04-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.5</u> |
| Effluent pH: | <u>7.5</u> |
| Effluent Temperature (°C): | <u>21.4</u> |

4. Wellfield Data:

| | Monthly | Instantaneous |
|--------|-------------|----------------|
| Source | Volume(gal) | Flow Rate(gpm) |
| W-357 | 248,600 | 5.9 |
| W-621 | 318,900 | 7.8 |
| W-620 | 161,600 | 3.7 |
| W-610 | 225,000 | 5.4 |
| W-704 | 257,400 | 6.1 |
| W-655 | 275,900 | 6.7 |
| W-1423 | 290,900 | 6.9 |
| Total: | 1,778,300 | 42.5 |

5. Discharge Information:

| West Perimeter Drainage Channel | TFB-R002 | 1,778,300 |
|---------------------------------|---------------|-----------|
| Discharge Location | Water Station | Volume |
| | Receiving | |

6. Comments:

| 7. I certify that the information in this report, | to the best of my | knowledge, is true and correct. |
|---|-------------------|---------------------------------|
| Operator Signature: | Mush. | Date: <u>08-29-2008</u> |

Land Observation Report date: TFB-R002 - West Perimeter Drainage Channel

| Water |
|---------|
| |
| |
| orrect. |
| (|

Self-Monitoring Report LLNL Treatment Facility B (TFB) AREA TFB

1. Reporting Period: Business Month September Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 733

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>09-03-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.5</u> |
| Effluent pH: | <u>7.5</u> |
| Effluent Temperature (°C): | <u>21.6</u> |

4. Wellfield Data:

| | Monthly | Instantaneous |
|--------|------------------|----------------|
| Source | Volume(gal) | Flow Rate(gpm) |
| TTLOFF | 251 000 | = 0 |
| W-357 | 251,800 | 5.8 |
| W-621 | 330,900 | 7.3 |
| W-620 | 163,500 | 3.7 |
| W-610 | 225,700 | 5.5 |
| W-704 | 267,900 | 6.1 |
| W-655 | 276,800 | 6.5 |
| W-1423 | 316,200 | 7. 1 |
| | | |
| Total: | <u>1,832,800</u> | <u>42.0</u> |

5. Discharge Information:

| West Perimeter Drainage Channel | TFB-R002 | 1.832.800 |
|---------------------------------|---------------|-----------|
| Discharge Location | Water Station | Volume |

6. Comments:

Facility down intermittently 9-22-08 through 9-26-08 due to low air flow.

7. I certify that the information in this peport, to the best of my knowledge, is true and correct.

Operator Signature: Date: 09-30-2008

Land Observation Report date: TFB-R002 - West Perimeter Drainage Channel

| 1. | Reporting Period: Business Month September Year | <u>2008</u> | |
|----------|---|--|--|
| 2. | Date compliance sampling performed <u>09-03-2008</u> | | |
| 3. | Weather Conditions: | | |
| | Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph): | 22.8 0 4/ SSW | |
| 4. | Receiving Data: | | |
| | Sample Location pH Temperature (C) Receiving Water N/M N/M | | |
| 5. | Land Observations, as "Yes" or "No", for reporting r | nonth: | |
| | | | |
| 1 | Visual Observations | Effluent | Receiving Water |
| | Visual Observations Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use | Effluent No No No Not Required Not Required | Receiving Water No No No No No |
| 6. | Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity | No No Not Required | No No |
| 6. 7. | Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use | No Not Required Not Required | <u>No</u> <u>No</u> <u>No</u> <u>No</u> |
| | Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use Comments: | No Not Required Not Required Not Required | No No No No s true and correct. |

Self-Monitoring Report LLNL Treatment Facility C (TFC) AREA TFC

1. Reporting Period: Business Month <u>July</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): <u>688</u>

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>07-02-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.5</u> |
| Effluent pH: | <u>7.5</u> |
| Effluent Temperature (°C): | <u>20.8</u> |

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) |
|--------|---------------------|------------------------------|
| W-701 | 561,847 | 13.6 |
| W-1015 | 279,401 | 6.7 |
| W-1116 | 71,856 | 1.9 |
| W-1103 | 91,016 | 2.1 |
| W-1102 | 116,112 | 3.3 |
| W-1104 | 1,141,635 | 27.5 |
| Total: | 2,261,867 | 55.1 |

5. Discharge Information:

Pischarge Location Receiving
Water Station Volume

Arroyo Las Positas TFC-R003 2,261,867

6. Comments:

Facility down due to watchdog alarm on 7-26-08. Restarted system on 7-28-08.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-31-2008

Land Observation Report date: TFC-R003 - Arroyo Las Positas

| 1. | Reporting Period: Business Month <u>July</u> Year <u>2008</u> | · - | |
|---------------------------------|---|---------------------------|------------------------|
| 2. | Date compliance sampling performed <u>07-02-2008</u> | | |
| 3. | Weather Conditions: | | |
| | Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph): | 18.5 0 6/ SW | |
| 4. | Receiving Data: | | |
| | Sample Location pH Temperature (C) Receiving Water N/M N/M | | |
| 5. | Land Observations, as "Yes" or "No", for reporting i | nonth: | |
| | <u>Visual Observations</u> | <u>Effluent</u> | Receiving Water |
| | Floating and Suspended Materials of Waste Origin Odor | <u>No</u> <u>No</u> | <u>No</u> <u>No</u> |
| | Discoloration and Turbidity Evidence of Beneficial Water Use | Not Required Not Required | No No No |
| 6. | | | <u>No</u> <u>No</u> |
| 6.7. | Evidence of Beneficial Water Use | Not Required | is true and correct. |

Self-Monitoring Report LLNL Treatment Facility C (TFC) AREA TFC

1. Reporting Period: Business Month <u>August</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): _670

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>08-04-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.5</u> |
| Effluent pH: | <u>7.5</u> |
| Effluent Temperature (°C): | <u>20.2</u> |

4. Wellfield Data:

| Source | Monthly <u>Volume(gal)</u> | Instantaneous Flow Rate(gpm) |
|--------|-------------------------------|------------------------------|
| W-701 | 542,859 | 13.5 |
| W-1015 | 270,014 | 6.8 |
| W-1116 | 58,334 | 1.4 |
| W-1103 | 92,931 | 2.1 |
| W-1102 | 96,505 | 3.4 |
| W-1104 | 1,106,764 | 27.6 |
| Total: | 2,167,407 | 54.8 |

5. Discharge Information:

| Arroyo Las Positas | TFC-R003 | 2,167,407 |
|--------------------|---------------|-----------|
| Discharge Location | Water Station | Volume |

Doggizzina

6. Comments:

Facility secured on 8-19-08 to change out diffusers. Diffusers changed out and facility restarted on 8-20-08.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 08-29-2008

Land Observation Report date: TFC-R003 - Arroyo Las Positas

| 1. | Reporting Period: Business Month August Year 20 | <u>908 </u> | |
|---------------------------------|---|--|--|
| 2. | Date compliance sampling performed <u>08-04-2008</u> | | |
| 3. | Weather Conditions: | | |
| | Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph): | 19.4 0 6/ SW | |
| 4. | Receiving Data: | | |
| | Sample Location pH Temperature (C) Receiving Water N/M N/M | | |
| 5. | Land Observations, as "Yes" or "No", for reporting r | month: | |
|) | Visual Observations | Effluent | Receiving Water |
| | Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity | No No Not Required | <u>No</u> <u>No</u> <u>No</u> <u>No</u> |
| | Evidence of Beneficial Water Use | Not Required | No |
| 6. | • | - | No |
| 6.7. | Evidence of Beneficial Water Use | Not Required t of my knowledge, i | is true and correct. |

Self-Monitoring Report LLNL Treatment Facility C (TFC) AREA TFC

1. Reporting Period: Business Month <u>September</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August September $\frac{30}{16}$ $\frac{31}{17}$ $\frac{02}{18}$ $\frac{03}{19}$ $\frac{04}{20}$ $\frac{05}{21}$ $\frac{06}{22}$ $\frac{07}{23}$ $\frac{08}{24}$ $\frac{09}{25}$ $\frac{10}{26}$ $\frac{11}{27}$ $\frac{12}{28}$ $\frac{13}{29}$ $\frac{14}{30}$

Total monthly time facility operated (hours): <u>767</u>

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>09-03-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.0</u> |
| Effluent pH: | <u>7.5</u> |
| Effluent Temperature (°C): | <u>21.6</u> |

4. Wellfield Data:

| | Monthly | Instantaneous |
|--------|-------------|----------------|
| Source | Volume(gal) | Flow Rate(gpm) |
| W-701 | 622,546 | 13.3 |
| W-1015 | 310,644 | 6.7 |
| W-1116 | 57,834 | 1.8 |
| W-1103 | 114,366 | 2.0 |
| W-1102 | 107,492 | 3.6 |
| W-1104 | 1,265,946 | 27.2 |
| Total: | 2,478,828 | <u>54.6</u> |

5. Discharge Information:

Pischarge Location Receiving Water Station Volume

Arroyo Las Positas TFC-R003 2,478,828

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 09-30-2008

Land Observation Report date: TFC-R003 - Arroyo Las Positas

| 1. | Reporting Period: Business Month <u>September</u> Year | 2008 | |
|----------|---|--|-----------------|
| 2. | Date compliance sampling performed <u>09-03-2008</u> | | |
| 3. | Weather Conditions: | | |
| | Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph): | 22.8 0 4/ SSW | |
| 4. | Receiving Data: | | |
| | Sample Location pH Temperature (C) Receiving Water N/M N/M | | |
| 5. | Land Observations, as "Yes" or "No", for reporting r | nonth: | |
| | | | |
| j | <u>Visual Observations</u> | <u>Effluent</u> | Receiving Water |
| <i>,</i> | Visual Observations Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use | Effluent No No No Required Not Required | No No No No |
| 6. | Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity | No No Not Required | No |

Self-Monitoring Report LLNL Mini Treatment Unit 1 (MTU1) AREA TFC-E

| 1. I | Reportin | g Per | riod: | Busi | ness | Moı | nth | <u>Ju</u> | <u>ly</u> | Year | 200 | <u>8</u> | | | | | | | |
|------|--|-----------------|-------------|--------------------|------------|----------|----------|-------------|---------------|--------------|----------|-----------------|------------|-----------------------|------------------------|----------------|-----------|-----------|--|
| 2. I | Oates (in | n bol | d an | d <u>un</u> | derli | ine) | trea | ted g | rour | ıd wa | iter v | vas d | lisch | arge | d | | • | | |
| | July | | 01 16 | 02 17 | 03 18 | 04 19 | 05 20 | 06 21 | 07 22 | 08 23 | 09 24 | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 30 | 31 | |
| | Total n | nonth | ıly tiı | me fa | acilit | у ор | erate | d (ho | ours) | : _ | <u>0</u> | | | | | | | | |
| 3. I | Monthly | Com | plia | nce I | Data: | | | | | | | | | | | | | | |
| | Date co Influen Effluen Effluen | it pH: it pH | : : | | | | form | ned (1 | m/d/ | y): <u>N</u> | lot M | <u>Ieas</u> | ured | i | | | | | |
| 4. V | Wellfield | d Dat | a: | | | | | | | | | | | | | | | | |
| *** | Source | <u>ce</u> | | Mon <u>Volu</u> | • | gal) | | | aneo ate(g | us gpm) | | | | | | | | | |
| | W-41 W-30 | | | | | 0 | | | 0.0 0.0 | | | | | | | | | | |
| | Total | l: | • | | | 0 | | | 0.0 | <u>)</u> | | | | | | | | | |
| 5. I | Discharg | ge Inf | orma | tion: | | | | | | | | | | | | | | | |
| | Disch | narge | Loc | ation | <u>1</u> | | | | | | | ceivii ter S | _ | <u>n</u> | Ž | Volu | <u>ne</u> | | |
| | _Ar | royo | Las | <u>Posi</u> | <u>tas</u> | | | | | | <u>T</u> | FC- | R003 | 3 | | | 0 | | |
| 6. 0 | Commen The t the re | reatn | | | - | | | | | | | | ding | ; redi | uctio | n. Do | OE a | nd | |
| | certify terator Si | | / | | ation | n in t | hls r | epor W Z | t, to | the b | est/0 | of my | kno Dat | wled e: 0 7 | lge, i 7-31- | s true 2008 | e and | l correct | |
| | | | | | | | | | | | | | | | | | | | |

Self-Monitoring Report LLNL Mini Treatment Unit 1 (MTU1) AREA TFC-E

| 1. Reporting Pe | riod: B | Business | Mon | ıth | <u> A</u> ı | igusi | <u>t</u> Y | ear <u>2</u> | 2008 | | | | | | |
|---|----------|--------------------|-------------|----------|-------------|---------------|--------------|--------------|----------------|----------|--------------|--------------|----------|-----------|--------|
| 2. Dates (in bo | ld and | <u>underli</u> | <u>ne</u>) | treat | ed g | roun | ıd wa | iter v | vas d | isch | arge | d | | | |
| August | | 02 03 17 18 | 04 19 | 05 20 | 06 21 | 07 22 | | 09 24 | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 | |
| Total month | hly time | e facilit | у оре | erate | d (ho | ours) | : | <u>o</u> | | | | | | | |
| 3. Monthly Con | nplianc | e Data: | | | | | | | | | | | | | |
| Date compl Influent pH Effluent pH Effluent Te | : [: | | | form | ed (1 | m/d/ | y): <u>N</u> | lot M | <u>Ieası</u> | ıred | • | | | | |
| 4. Wellfield Da | ta: | | | | | | | | | | | | | | |
| Source | | Ionthly olume(g | gal) | | | aneo ate(g | us gpm) | | | | | | | | |
| W-413 W-368 | | | 0 | | | 0.0 0.0 | | | | | | | | | |
| Total: | | | <u>0</u> | | | 0.0 | <u>)</u> | | | | | | | | |
| 5. Discharge Int | formati | ion: | | | | | | Das | | •~ | | | | | |
| Discharge | e Locat | tion | | | | | | | eivii ter S | _ | <u>n</u> | Ž | Volu | <u>ne</u> | |
| Arroyo | Las P | <u>ositas</u> | | | | | | <u>T</u> | FC- | R003 | 3 | | - | 0 | |
| 6. Comments: The treatre the regula | | | | | | | | | | ding | redi | uctio | n. DO | OE and | l |
| 7. I certify that | the info | ormation | in t | his re | epor | | | | | kno | wlec | lge, i | s tru | e and c | orrect |
| Operator Signat | ure: | | lou | | <u> </u> | Cau | 7 | usC | | Dat | e: <u>09</u> | 9-02- | 2008 | | |

Self-Monitoring Report LLNL Mini Treatment Unit 1 (MTU1) AREA TFC-E

| 1. Reporting Per | riod: | Busi | ness | Mor | nth | Sei | nten | ıber | Υe | ear 2 | 008 | | | | | |
|---|---|-------------|--------------|----------|----------|-------|---------------|--------------|----------|---------------|----------|----------------|------|-------------|-----------|----------|
| | | | | | | | | | - | | | orga | vd | | | |
| 2. Dates (III bolt | 2. Dates (in bold and <u>underline</u>) treated ground water was discharged | | | | | | | | | | | | | | | |
| August September | 30 01 16 | 02 | | 04 19 | 05 20 | | | | 09 24 | | 11 26 | | | | 15 30 | |
| Total month | ly tir | ne fa | cility | y op | erateo | d (ho | ours) | : _ | <u>0</u> | | | | | | | |
| 3. Monthly Com | pliar | nce D | Oata: | | | | | | | | | | | | | |
| Date compli Influent pH: Effluent pH: Effluent Ten | : | | | - | form | ed (1 | m/d/ː | y): <u>N</u> | lot M | <u>Ieas</u> | ured | <u>[</u> | | | | |
| 4. Wellfield Data | a: | | | | | | | | | | | | | | | |
| Source | | Mon Volu | thly me(g | gal) | | | aneo ate(g | us gpm) | | | | | | | | |
| W-413 W-368 | | | | 0 0 | | | 0.0 0.0 | | | | | | | | | |
| Total: | - | | | 0 | | | 0.0 | <u>)</u> | | | | | | | | |
| 5. Discharge Info | orma | tion: | | | | | | | | | | | | | | |
| Discharge | | | | | | | | | | eivi ter S | _ | <u>on</u> | | <u>Volu</u> | <u>me</u> | |
| Arroyo | Arroyo Las Positas | | | | | | | | | | | | | | _0 | |
| 6. Comments: This treatment reduction. and resour | Faci | | | | | | | | | | | | | | _ | ff |
| 7. I certify that the | ne in | | A Species | in t | | , | | | | f my | kno | wle | dge, | is tru | e and | correct. |
| Operator Signatu | ıre: | 76 | w | | 16 | Wa | qu | , (| / | | Dat | te: 1 0 | 0-09 | -2008 | 3 | |

Self-Monitoring Report LLNL Portable Treatment Unit 1 (PTU1) AREA TFC-SE

| 1. Reporting | Period: | Busin | ess Moi | nth | <u>Ju</u> | ly | Year | 200 | <u>8</u> | | | | | | | |
|--|---------------------------|-----------------------|----------------|----------|-----------|---------------|--------------|------------|-------------|--------------------|----------|----------|-----------------------|-----------|-------|-------|
| 2. Dates (in | bold an | d <u>und</u> | erline) | trea | ted g | roun | ıd wa | ıter v | vas d | lisch | arge | d | | | | |
| July | 01 16 | | 03 04 18 19 | 05 20 | 06 21 | 07 22 | 08 23 | 09 24 | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 30 | 31 | |
| Total me | onthly ti | me fac | cility op | erate | d (ho | ours) | : | <u>0</u> | | | | | | | | |
| 3. Monthly (| Complia | nce Da | ata: | | | | | | | | | | | | | |
| Date con Influent Effluent Effluent | pH: pH: | | | form | ed (1 | m/d/ | y): <u>N</u> | ot M | <u>Ieas</u> | ured | | | | | | |
| 4. Wellfield | Data: | | | | | | | | | | | | | | | |
| Source | | Month <u>Volun</u> | nly ne(gal) | | | aneo ate(g | us gpm) | | | | | | | | | |
| W-122 W-220 | | | 0 | | | 0.0 0.0 | | | | | | | | | | |
| Total: | | | 0 | | | 0.0 | <u>)</u> | | | | | | | | | |
| 5. Discharge | Informa | ation: | | | | | | | | | | | | | | |
| Discha | arge Loc | ation | | | | | | | ter S | ng <u>tatio</u> | <u>n</u> | Ţ | Volu | <u>me</u> | | |
| Arre | oyo Las | Posita | <u>as</u> | | | | | _ <u>T</u> | FC- | R003 | 3 | | | _0 | | |
| | s: eatment gulatory | | | | | | | | | ıding | ; redi | uctio | n. Do | OE a | nd | |
| 7. I certify th | | forma | tion in t | 1. | _ | | the b | / (| | | | | s true 2008 | | l com | rect. |

Self-Monitoring Report LLNL Portable Treatment Unit 1 (PTU1) AREA TFC-SE

1. Reporting Period: Business Month <u>August</u> Year <u>2008</u>

| 2. Dates (in bold and <u>underline</u>) treated ground water was discharged | | | | | | | | | | | | | | | | |
|--|----------|-------------|--------------|----------|----------|----------|---------------|--------------|----------|-----------------|-------------|----------|----------|----------|-----------|--|
| August | 01 16 | 02 17 | 03 18 | 04 19 | 05 20 | 06 21 | 07 22 | | 09 24 | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 | |
| Total monthly time facility operated (hours): _0 | | | | | | | | | | | | | | | | |
| 3. Monthly Compliance Data: | | | | | | | | | | | | | | | | |
| Date comp Influent pl Effluent p Effluent T | H: H: | • | - | | form | ned (1 | m/d/ <u>;</u> | y): <u>N</u> | lot N | <u> 1eas</u> | <u>ured</u> | i | | | | |
| 4. Wellfield D | ata: | | | | | | | | | | | | | | | |
| <u>Source</u> | | Mon Volu | thly me(g | gal) | | | aneo ate(g | | | | | | | | | |
| W-1213 W-2201 | | | | 0 | | | 0.0 0.0 | | | | | | | | | |
| Total: | - | | | 0 | | | 0.0 | <u>)</u> | | | | | | | | |
| 5. Discharge I | nforma | tion: | | | | | | | Dar | !! | | | | | | |
| Discharg | ge Loca | ation | <u>.</u> | | | | | | | ceivii ter S | _ | <u>n</u> | Ž | Volu | <u>ne</u> | |
| Arroy | o Las l | Posit | <u>tas</u> | | | | | | <u>T</u> | FC- | R003 | 3 | | - | 0 | |
| 5. Comments: The treatment facility is shutdown due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action. | | | | | | | | | | | | | | | | |
| 7. I certify that the information in this report, to the best of my knowledge, is true and correct. Operator Signature: Date: 09-02-2008 | | | | | | | | | | | | | | | | |
| | | | | | | | - | | | | | | | | | |

Self-Monitoring Report LLNL Portable Treatment Unit 1 (PTU1) AREA TFC-SE

| 1. Reporting Period: Business Month <u>September</u> Year <u>2008</u> | | | | | | | | | | | | | | | |
|---|--|--------------------|----------|----------|----------|----------|---------------|----------|----------|----------|----------|----------|----------|----------|---------------|
| 2. Dates (in bold and <u>underline</u>) treated ground water was discharged | | | | | | | | | | | | | | | |
| August September | 30 01 16 | 31 02 17 | 03 18 | 04 19 | 05 20 | 06 21 | | | 09 24 | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 30 |
| Total month | Total monthly time facility operated (hours): _0 | | | | | | | | | | | | | | |
| 3. Monthly Com | pliaı | nce I | Data: | | | | | | | | | | | | |
| Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C): | | | | | | | | | | | | | | | |
| 4. Wellfield Data | 4. Wellfield Data: | | | | | | | | | | | | | | |
| Source | | Mon <u>Volu</u> | • | gal) | | | aneo ate(g | | • | | | | | | |
| W-1213 W-2201 | | | | 0 | | | 0.0 0.0 | | | | | | | | |
| Total: | , | | | 0 | | | 0.0 | <u>)</u> | | | | | | | |
| 5. Discharge Information: Receiving Discharge Location Water Station Volume | | | | | | | | | | | | | | | |
| Arroyo Las Positas TFC-R003 0 | | | | | | | | | | | | | | | |
| 6. Comments: This treatment facility was shut down on 5-9-08 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources. | | | | | | | | | | | | | | | |
| 7. I certify that the | ne in | form | atio | in t | his 1 | | | | est 6 | fmy | kno | wled | lge, i | s tru | e and correct |
| Operator Signature: Date: 10-09-2008 | | | | | | | | | | | | | | | |

Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month July Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 611

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>07-07-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.5</u> |
| Effluent pH: | <u>7.5</u> |
| Effluent Temperature (°C): | <u>21.7</u> |

4. Wellfield Data:

| | Monthly | Instantaneous |
|---------|-------------|----------------|
| Source | Volume(gal) | Flow Rate(gpm) |
| W-653 | 5,400 | 0.0 |
| W-351 | 0 | 0.0 |
| W-907-2 | 398,600 | 11.1 |
| W-906 | 0 | 0.0 |
| W-1206 | 468,100 | 12.9 |
| W-1208 | 831,100 | 22.9 |
| W-2102 | 0 | 0.0 |
| W-2011 | 0 | 0.0 |
| W-2101 | 0 | 0.0 |
| Total: | 1,703,200 | 46.9 |

5. Discharge Information:

| Discharge Location | Water Station | Volume |
|--------------------|---------------|-----------|
| Arroyo Las Positas | TFC-R003 | 1,703,200 |

6. Comments:

Facility secured on 7-25-08 for air stripper descaling and blower/discharge pump changeout/maintenance.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 07-31-2008

Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month August Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

| | Monthly | Instantaneous |
|---------|-------------|----------------|
| Source | Volume(gal) | Flow Rate(gpm) |
| W-653 | 0 | 0.0 |
| W-351 | 0 | 0.0 |
| W-907-2 | 0 | 0.0 |
| W-906 | 0 | 0.0 |
| W-1206 | 0 | 0.0 |
| W-1208 | 0 | 0.0 |
| W-2102 | 0 | 0.0 |
| W-2011 | 0 | 0.0 |
| W-2101 | 0 | 0.0 |
| Total: | <u>0</u> | 0.0 |

5. Discharge Information:

| Discharge Location | Water Station | Volume |
|--------------------|---------------|--------|
| Arroyo Las Positas | _TFC-R003 | 0 |

6. Comments:

Facility down for maintenance.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Old Chwagis C Date: 09-02-2008

Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month <u>September</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 30 31 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

| | Monthly | Instantaneous |
|---------------|-------------|-------------------|
| Source Source | Volume(gal) | Flow Rate(gpm) |
| XXI | 0 | 0.0 |
| W-653 | 0 | 0.0 |
| W-351 | 0 | 0.0 |
| W-907-2 | 0 | 0.0 |
| W-906 | 0 | 0.0 |
| W-1206 | 0 | 0.0 |
| W-1208 | 0 | 0.0 |
| W-2102 | 0 | 0.0 |
| W-2011 | 0 | 0.0 |
| W-2101 | 0 | 0.0 |
| 1 | | |
| Total: | <u>0</u> | $\underline{0.0}$ |

5. Discharge Information:

| Arroyo Las Positas | TFC-R003 | 0 |
|--------------------|---------------|--------|
| Discharge Location | Water Station | Volume |

Danairrina

6. Comments:

This treatment facility was shut down on 7-25-08 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd) LLNL Treatment Facility D (TFD) AREA TFD

Operator Signature: _______ Date: 10-09-2008

Self-Monitoring Report LLNL Portable Treatment Unit 8 (PTU8) AREA TFD-E

1. Reporting Period: Business Month July Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): <u>742</u>

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | 07-07-2008 |
|---|-------------|
| Influent pH: | <u>7.5</u> |
| Effluent pH: | <u>7.5</u> |
| Effluent Temperature (°C): | 24.1 |

4. Wellfield Data:

| | Monthly | Instantaneous |
|--------|-------------|----------------|
| Source | Volume(gal) | Flow Rate(gpm) |
| W-2006 | 1,600 | 0.0 |
| W-2203 | 37,600 | 0.9 |
| W-1255 | 0 | 0.0 |
| W-1253 | 0 | 0.0 |
| W-1303 | 36,200 | 1.0 |
| W-1307 | 236,600 | 6.2 |
| W-1404 | 0 | 0.0 |
| W-1550 | 99,200 | 2.7 |
| W-1301 | 52,600 | 1.3 |
| W-1306 | 10,000 | 0.3 |
| Total: | 473,800 | 12.4 |

5. Discharge Information:

| Arrovo Las Positas | TFC-R003 | 473.800 |
|--------------------|---------------|---------------|
| Discharge Location | Water Station | <u>Volume</u> |
| | Receiving | |

6. Comments:

Facility down on 7-12-08 due to Snap I/O fault. Restarted on 7-14-08.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-31-200

Self-Monitoring Report LLNL Portable Treatment Unit 8 (PTU8) AREA TFD-E

1. Reporting Period: Business Month August Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): <u>706</u>

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>08-05-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.5</u> |
| Effluent pH: | 8.0 |
| Effluent Temperature (°C): | 20.4 |

4. Wellfield Data:

| Source | Monthly <u>Volume(gal)</u> | Instantaneous Flow Rate(gpm) |
|--------|-------------------------------|------------------------------|
| W-1255 | 0 | 0.0 |
| W-1253 | 0 | 0.0 |
| W-1307 | 201,700 | 6.3 |
| W-1303 | 31,800 | 1.1 |
| W-1306 | 8,700 | 0.4 |
| W-1404 | 0 | 0.0 |
| W-1550 | 83,900 | 2.6 |
| W-1301 | 44,900 | 1.2 |
| W-2006 | 1,400 | 0.0 |
| W-2203 | 35,200 | 1.1 |
| Total: | 407,600 | 12.7 |

5. Discharge Information:

| Arrovo Las Positas | TFC-R003 | 407,600 |
|--------------------|---------------|---------|
| Discharge Location | Water Station | |

6. Comments:

Facility down intermittently throughout month due to Snap I/O fault. The monthly hours of operation reported may exceed the actual hours operated. We are investigating this potential error. However, the dates of operation reported are accurate.

Self-Monitoring Report (cont'd) LLNL Portable Treatment Unit 8 (PTU8) AREA TFD-E

| 7. I certify that the in | form ati on in this | report, to | the best of my | knowledge, is true a | and correct. |
|--------------------------|--------------------------------|------------|----------------|-------------------------|--------------|
| Operator Signature: _ | Show | Cawag | u.C. | Date: <u>09-04-2008</u> | |

Self-Monitoring Report LLNL Portable Treatment Unit 8 (PTU8) AREA TFD-E

1. Reporting Period: Business Month September Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 30 31 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 691

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>09-08-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.5</u> |
| Effluent pH: | 8.0 |
| Effluent Temperature (°C): | 19.6 |

4. Wellfield Data:

| | Monthly | Instantaneous |
|--------|-------------|----------------|
| Source | Volume(gal) | Flow Rate(gpm) |
| W-1255 | 0 | 0.0 |
| W-1253 | 0 | 0.0 |
| W-1307 | 224,700 | 6.4 |
| W-1303 | 36,900 | 1.0 |
| W-1306 | 11,000 | 0.3 |
| W-1404 | 0 | 0.0 |
| W-1550 | 91,400 | 2.7 |
| W-1301 | 45,300 | 1.1 |
| W-2006 | 1,200 | 0.0 |
| W-2203 | 42,000 | 1.2 |
| Total: | 452,500 | 12.7 |

5. Discharge Information:

| Arroyo Las Positas | TFC-R003 | 452,500 |
|--------------------|-------------------------|---------|
| Discharge Location | Receiving Water Station | Volume |

6. Comments:

Facility down on 8-29-08 for unknown reason. Restarted on 9-2-08. Facility down on 9-3-08 due to Snap I/O fault. Restarted on 9-4-08. Facility down on 9-5-08 due to Snap I/O fault. Restarted on 9-8-08. Facility down on 9-24-08 due to Snap I/O fault. Restarted on 9-25-08. The monthly hours of operation reported may exceed

Self-Monitoring Report (cont'd) LLNL Portable Treatment Unit 8 (PTU8) AREA TFD-E

the actual hours operated. We are investigating this potential error. However, the dates of operation reported are accurate.

| 7. I certify that the in | formation in th | is/report, to | the best of my | knowledge, is true and co | orrect |
|--------------------------|-----------------|---------------|----------------|---------------------------|--------|
| Operator Signature: | 1.11 | Caran | uG | Date: <u>09-30-2008</u> | |
| | | (|) | | |

Self-Monitoring Report LLNL Portable Treatment Unit 10 (PTU10) AREA TFD-HPD

1. Reporting Period: Business Month July Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

| | Monthly | Instantaneous |
|--------|-------------|----------------|
| Source | Volume(gal) | Flow Rate(gpm) |
| W-1254 | 0 | 0.0 |
| W-1653 | 0 | 0.0 |
| W-1657 | 0 | 0.0 |
| W-1551 | 0 | 0.0 |
| W-1654 | 0 | 0.0 |
| W-1656 | 0 | 0.0 |
| W-1650 | 0 | 0.0 |
| W-1652 | 0 | 0.0 |
| W-1552 | 0 | 0.0 |
| W-1651 | 0 | 0.0 |
| W-1655 | 0 | 0.0 |
| Total: | <u>0</u> | 0.0 |

5. Discharge Information:

| Discharge Location | Receiving Water Station | Volume |
|--------------------|-------------------------|--------|
| Arroyo Las Positas | | |

6. Comments:

The treatment facility is shutdown due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd) LLNL Portable Treatment Unit 10 (PTU10) AREA TFD-HPD

Operator Signature: _

Date: **07-31-2008**

Self-Monitoring Report LLNL Portable Treatment Unit 10 (PTU10) AREA TFD-HPD

1. Reporting Period: Business Month <u>August</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) |
|--------|------------------------|------------------------------|
| W-1254 | 0 | 0.0 |
| W-1653 | 0 | 0.0 |
| W-1657 | 0 | 0.0 |
| W-1551 | 0 | 0.0 |
| W-1654 | 0 | 0.0 |
| W-1656 | 0 | 0.0 |
| W-1650 | 0 | 0.0 |
| W-1652 | 0 | 0.0 |
| W-1552 | 0 | 0.0 |
| W-1651 | 0 | 0.0 |
| W-1655 | 0 | 0.0 |
| Total: | <u>0</u> | 0.0 |

5. Discharge Information:

6. Comments:

The treatment facility is shutdown due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd) LLNL Portable Treatment Unit 10 (PTU10) AREA TFD-HPD

Operator Signature:

Date: 09-02-2008

Self-Monitoring Report LLNL Portable Treatment Unit 10 (PTU10) AREA TFD-HPD

- 1. Reporting Period: Business Month <u>September</u> Year <u>2008</u>
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 30 31 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

| | Monthly | Instantaneous |
|---------------|-------------|----------------|
| <u>Source</u> | Volume(gal) | Flow Rate(gpm) |
| XX/ 1054 | 0 | 0.0 |
| W-1254 | 0 | 0.0 |
| W-1653 | 0 | 0.0 |
| W-1657 | 0 | 0.0 |
| W-1551 | 0 | 0.0 |
| W-1654 | 0 | 0.0 |
| W-1656 | 0 | 0.0 |
| W-1650 | 0 | 0.0 |
| W-1652 | 0 | 0.0 |
| W-1552 | 0 | 0.0 |
| W-1651 | 0 | 0.0 |
| W-1655 | 0 | 0.0 |
| Total: | <u>0</u> | 0.0 |

5. Discharge Information:

| Arroyo Las Positas | TFC-R003 | _0 |
|--------------------|---------------|---------------|
| Discharge Location | Water Station | <u>Volume</u> |

Dacaiving

6. Comments:

This treatment facility was shut down on 10-11-07 for a bioremediation pilot test at this location. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and

Self-Monitoring Report (cont'd) LLNL Portable Treatment Unit 10 (PTU10) AREA TFD-HPD

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| | | | knowledge, is true and correct |
|-----------------------|-------|-----------|--------------------------------|
| Operator Signature: _ | Strii | Courseul. | Date: <u>10-09-2008</u> |

Self-Monitoring Report LLNL Portable Treatment Unit 2 (PTU2) AREA TFD-S

| 1. Reporting Period: Business Month | July | Year 2008 |
|-------------------------------------|------|------------------|
|-------------------------------------|------|------------------|

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 **22** 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): _1

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>07-22-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.5</u> |
| Effluent pH: | 7.5 |
| Effluent Temperature (°C): | <u>23.1</u> |

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) |
|------------------|---------------------|------------------------------|
| W-1503 | 1,400 | 17.0 |
| W-1510 W-1504 | 991 | 3.2 |
| W-1504 | 220 | 2.7 |
| Total: | <u>2,611</u> | 22.9 |

5. Discharge Information:

| Arroyo Las Positas | TFC-R003 | 2,611 |
|--------------------|-------------------------|--------|
| Discharge Location | Receiving Water Station | Volume |

6. Comments:

System secured on 5/7/08 for water level transducer repairs (pending) at wells: W-1503 and W-1510. System operated on 7/22/08 to collect monthly samples and readings.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 08-04-2008

Self-Monitoring Report LLNL Portable Treatment Unit 2 (PTU2) AREA TFD-S

1. Reporting Period: Business Month August Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 2

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):

Influent pH:

Effluent pH:

7.5

Effluent Temperature (°C):

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) |
|--------|---------------------|------------------------------|
| W-1503 | 2,000 | 17.0 |
| W-1510 | 368 | 3.2 |
| W-1504 | 343 | 2.9 |
| | | |
| Total: | <u>2,711</u> | <u>23.1</u> |

5. Discharge Information:

| Arrovo Las Positas | TFC-R003 | 2,711 |
|--------------------|---------------|--------|
| Discharge Location | Water Station | Volume |

6. Comments:

System secured on 5/7/08 for water level transducer repairs (pending) at wells: W-1503 and W-1510. System operated on 8/22/08 to collect monthly samples and readings.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 09-03-2008

Self-Monitoring Report LLNL Portable Treatment Unit 2 (PTU2) AREA TFD-S

1. Reporting Period: Business Month September Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 30 31 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 **24** 25 26 27 28 29 30

Total monthly time facility operated (hours): $\underline{1}$

3. Monthly Compliance Data:

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) |
|--------|---------------------|------------------------------|
| W-1503 | 912 | 17.2 |
| W-1510 | 168 | 3.2 |
| W-1504 | 163 | 3.1 |
| Total: | 1,243 | 23.5 |

5. Discharge Information:

| Arroyo Las Positas | TFC-R003 | 1,243 |
|--------------------|---------------|--------|
| Discharge Location | Water Station | Volume |

6. Comments:

System secured on 5/7/08 for water level transducer repairs, pending at wells: W-1503 and W-1510. System operated on 9/24/08 to collect monthly samples and readings.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: ______ Date: 10-02-2008

Self-Monitoring Report LLNL Portable Treatment Unit 11 (PTU11) AREA TFD-SE

1. Reporting Period: Business Month July Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): <u>753</u>

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>07-02-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.5</u> |
| Effluent pH: | <u>8.0</u> |
| Effluent Temperature (°C): | 22.8 |

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) |
|-------------|---------------------|------------------------------|
| W-314 | 0 | 0.0 |
| W-1403 | 10,955 | 6.6 |
| W-1308 | 145,131 | 3.3 |
| W-1904 | 0 | 0.0 |
| W-2005 | 48,521 | 0.8 |
| SIP-ETC-201 | 0 | 0.0 |
| Total: | 204,607 | 10.7 |

5. Discharge Information:

| Arroyo Las Positas | _TFC-R003 | 204,607 |
|--------------------|-------------------------|---------|
| Discharge Location | Receiving Water Station | Volume |

6. Comments:

W-1403 secured on 7-2-08 due to questionable accumulator reading.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 07-31-2008

Self-Monitoring Report LLNL Portable Treatment Unit 11 (PTU11) AREA TFD-SE

1. Reporting Period: Business Month August Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 702

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>08-05-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.0</u> |
| Effluent pH: | <u>8.0</u> |
| Effluent Temperature (°C): | <u>19.3</u> |

4. Wellfield Data:

| | Monthly | Instantaneous |
|---------------|----------------|----------------|
| <u>Source</u> | Volume(gal) | Flow Rate(gpm) |
| W-314 | 0 | 0.0 |
| W-1403 | 0 | 0.0 |
| W-1308 | 136,236 | 3.2 |
| W-1904 | 0 | 0.0 |
| W-2005 | 55,277 | 0.9 |
| SIP-ETC-201 | 0 | 0.0 |
| | | |
| Total: | <u>191,513</u> | 4.2 |

5. Discharge Information:

| Discharge Location | Receiving Water Station | <u>Volume</u> |
|--------------------|-------------------------|---------------|
| Arroyo Las Positas | TFC-R003 | 191,513 |

6. Comments:

| 7. I certify that the in | formation in this | report, to | the best of my | knowledge, is true and | l correct |
|--------------------------|-------------------|------------|----------------|-------------------------|-----------|
| Operator Signature: _ | OCH | Cowas | m Cs | Date: <u>08-29-2008</u> | |

Self-Monitoring Report LLNL Portable Treatment Unit 11 (PTU11) AREA TFD-SE

- 1. Reporting Period: Business Month <u>September</u> Year <u>2008</u>
- 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): 676

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>09-08-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.5</u> |
| Effluent pH: | 8.0 |
| Effluent Temperature (°C): | <u>19.8</u> |

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) |
|-------------|---------------------|------------------------------|
| W-314 | 0 | 0.0 |
| W-1403 | 0 | 0.0 |
| W-1308 | 143,787 | 3.3 |
| W-1904 | 0 | 0.0 |
| W-2005 | 67,283 | 1.8 |
| SIP-ETC-201 | 0 | 0.0 |
| Total: | 211,070 | 5.1 |

5. Discharge Information:

| Arrovo Las Positas | TFC-R003 | 211,070 |
|--------------------|-------------------------|---------|
| Discharge Location | Receiving Water Station | Volume |

6. Comments:

Facility down 9-12-08 due to power failure. Facility restarted on 9-15-08. System down intermittently from 9-16-08 through 9-18-08 due to low flow.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 09-30-2008

Self-Monitoring Report LLNL Portable Treatment Unit 12 (PTU12) AREA TFD-SS

1. Reporting Period: Business Month July Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

July <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 </u>

Total monthly time facility operated (hours): 757

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>07-16-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.5</u> |
| Effluent pH: | <u>7.5</u> |
| Effluent Temperature (°C): | <u>21.9</u> |

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) |
|--------|---------------------|------------------------------|
| W-1523 | 385,260 | 8.6 |
| W-1603 | 225,077 | 0.0 |
| W-1602 | 112,735 | 4.7 |
| W-1601 | 49,165 | 1.1 |
| Total: | 772,237 | 14.4 |

5. Discharge Information:

6. Comments:

W-1603 shut down, secure pending electronic evaluation.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 08-04-2008

Self-Monitoring Report LLNL Portable Treatment Unit 12 (PTU12) AREA TFD-SS

1. Reporting Period: Business Month August Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 700

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>08-08-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.5</u> |
| Effluent pH: | <u>7.5</u> |
| Effluent Temperature (°C): | <u>21.4</u> |

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) |
|--------|------------------------|------------------------------|
| W-1523 | 347,755 | 8.4 |
| W-1603 | 0 | 0.0 |
| W-1602 | 203,245 | 4.8 |
| W-1601 | 46,512 | 1.3 |
| Total: | 597,512 | 14.5 |

5. Discharge Information:

| Discharge Location | Receiving Water Station | Volume |
|--------------------|-------------------------|---------|
| Arroyo Las Positas | TFC-R003 | 597,512 |

6. Comments:

| 7. | I certify that the | information | in this report | to the best | of my | knowledge, is t | rue and | correct |
|----------|--------------------|--------------------|----------------|-------------|-------|-----------------|---------|---------|
| | J | | | | • | | | |
| <u> </u> | 4 0: | #/ <i>[[[[</i>]]] | | 1 | | D . 00 02 20 | | |

Self-Monitoring Report LLNL Portable Treatment Unit 12 (PTU12) AREA TFD-SS

1. Reporting Period: Business Month September Year 2008

2. Dates (in **bold** and underline) treated ground water was discharged

August September $\frac{30}{01}$ $\frac{31}{02}$ $\frac{03}{18}$ $\frac{04}{19}$ $\frac{05}{20}$ $\frac{06}{21}$ $\frac{07}{22}$ $\frac{08}{23}$ $\frac{09}{24}$ $\frac{10}{25}$ $\frac{11}{26}$ $\frac{12}{27}$ $\frac{13}{28}$ $\frac{14}{29}$ $\frac{15}{30}$

Total monthly time facility operated (hours): __778

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>09-10-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.5</u> |
| Effluent pH: | <u>7.5</u> |
| Effluent Temperature (°C): | <u>20.9</u> |

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) |
|--------------------------------------|-----------------------------------|------------------------------|
| W-1523 W-1603 W-1602 W-1601 | 385,610 0 223,719 52,918 | 8.2 0.0 4.9 1.1 |
| Total: | 662,247 | 14.2 |

5. Discharge Information:

| Arroyo Las Positas | TFC-R003 | 662,247 | |
|--------------------|---------------------------|---------|--|
| Discharge Location | Receiving Water Station V | | |

6. Comments:

W-1603 shut down, secure pending electronic evaluation.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 10-02-2008

Self-Monitoring Report LLNL Portable Treatment Unit 6 (PTU6) AREA TFD-W

1. Reporting Period: Business Month July Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

July <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 </u>

Total monthly time facility operated (hours): <u>759</u>

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-15-2008Influent pH: 7.5Effluent pH: 7.5Effluent Temperature (°C): 21.3

4. Wellfield Data:

| Source | Monthly <u>Volume(gal)</u> | Instantaneous Flow Rate(gpm) |
|--------|-------------------------------|------------------------------|
| W-1216 | 184,473 | 4.0 |
| W-1215 | 190,886 | 4.2 |
| W-1902 | 579,592 | 12.7 |
| Total: | 954,951 | 20.9 |

5. Discharge Information:

| Arroyo Las Positas | TFC-R003 | 954,951 | |
|--------------------|--|---------|--|
| Discharge Location | Receiving <u>Water Station</u> <u>Vo</u> | | |
| | Dagairing | | |

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 08-04-2008

Self-Monitoring Report LLNL Portable Treatment Unit 6 (PTU6) AREA TFD-W

1. Reporting Period: Business Month August Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 608

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>08-08-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.5</u> |
| Effluent pH: | 7.5 |
| Effluent Temperature (°C): | 21.1 |

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) |
|----------------------------|------------------------------|------------------------------|
| W-1216 W-1215 W-1902 | 150,028 42,079 445,729 | 4.1 0.0 12.5 |
| Total: | 637,836 | <u>16.6</u> |

5. Discharge Information:

| Discharge Location | Water Station | Volume |
|--------------------|-----------------|----------|
| Arroyo Las Positas | TFC-R003 | _637,836 |

Receiving

6. Comments:

System shut down and was secured on 8/25/08 due to electronic (leak detection system) failure. Repairs pending.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 09-02-2008

Self-Monitoring Report LLNL Portable Treatment Unit 6 (PTU6) AREA TFD-W

1. Reporting Period: Business Month September Year 2008

2. Dates (in **bold** and underline) treated ground water was discharged

August 30 31

September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 444

3. Monthly Compliance Data:

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) |
|----------------------------|-------------------------|------------------------------|
| W-1216 W-1215 W-1902 | 125,481 0 451,225 | 4.7 0.0 16.9 |
| Total: | <u>576,706</u> | <u>21.6</u> |

5. Discharge Information:

Discharge Location Receiving
Water Station Volume

Arroyo Las Positas TFC-R003 576,706

6. Comments:

W-1215 pump failed on 8-8-08, repairs pending.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 10-02-2008

Self-Monitoring Report LLNL Vapor Extraction System 11 (VES11) AREA VTFD-ETCS

- 1. Reporting Period: Business Month __July Year 2008
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

| | Monthly | Instantaneous | | F | Hours |
|-------------|---------------|-------------------|-----------|---------|--------|
| Source | Volume(cu. ft |) Flow Rate(scfm) | P(in. Hg) | T(°F) o | of Op. |
| W-1904 | 0 | 0.0 | 0 | 0 | 0 |
| W-ETC-2004 | B 0 | 0.0 | 0 | 0 | 0 |
| W-ETC-2004 | A 0 | 0.0 | 0 | 0 | 0 |
| W-ETC-2003 | 0 | 0.0 | 0 | 0 | 0 |
| SIP-ETC-201 | . 0 | 0.0 | 0 | 0 | 0 |
| Total: | <u>0</u> | 0.0 | | | |

4. Comments:

The treatment facility is shutdown due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 08-04-2008

Self-Monitoring Report LLNL Vapor Extraction System 11 (VES11) AREA VTFD-ETCS

1. Reporting Period: Business Month August Year 2008

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

| | Monthly | Instantaneous | | F | Hours | |
|---------------|---------------|-----------------|-----------|----------------|---|--|
| <u>Source</u> | Volume(cu. ft | Flow Rate(scfm) | P(in. Hg) | <u>T(°F)</u> c | of Op. | |
| W-1904 | 0 | 0.0 | 0 | 0 | 0 | |
| W-ETC-2004 | B 0 | 0.0 | 0 | 0 | 0 | |
| W-ETC-2004 | A 0 | 0.0 | 0 | 0 | 0 | |
| W-ETC-2003 | 0 | 0.0 | 0 | 0 | 0 | |
| SIP-ETC-201 | 0 | 0.0 | 0 | 0 | 0 | |
| Total: | <u>0</u> | 0.0 | | | S BOOKEN ALD SOUS BOAR PROMISED FOR SUM ANALYSIS AS | |

4. Comments:

The treatment facility is shutdown due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 09-02-2008

Self-Monitoring Report LLNL Vapor Extraction System 11 (VES11) AREA VTFD-ETCS

1. Reporting Period: Business Month September Year 2008

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

August 30 31 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

| | Monthly | Instantaneous | | | Hours |
|---------------|----------------|-----------------|-----------|------------------------|--------|
| <u>Source</u> | Volume(cu. ft) | Flow Rate(scfm) | P(in. Hg) | $\underline{T(^{o}F)}$ | of Op. |
| W-1904 | 0 | 0.0 | 0 | 0 | 0 |
| W-ETC-2004 | \mathbf{B} 0 | 0.0 | 0 | 0 | 0 |
| W-ETC-2004 | A 0 | 0.0 | 0 | 0 | 0 |
| W-ETC-2003 | 0 | 0.0 | 0 | 0 | 0 |
| SIP-ETC-201 | . 0 | 0.0 | 0 | 0 | 0 |
| | | | | | |
| Total: | <u>0</u> | <u>0.0</u> | | | |

4. Comments:

This treatment facility was shut down on 8/12/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 10-30-2003

Self-Monitoring Report LLNL Vapor Extraction System 07 (VES07) AREA VTFD-HPD

- 1. Reporting Period: Business Month <u>July</u> Year <u>2008</u>
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

| | Monthly | Instantaneous | | | Hours |
|------------|---------------|-------------------|-----------|-------|--------|
| Source | Volume(cu. ft | j Flow Rate(scfm) | P(in. Hg) | T(°F) | of Op. |
| W-1651 | 0 | 0.0 | 0 | 0 | 0 |
| W-1653 | 0 | 0.0 | 0 | 0 | 0 |
| W-1657 | 0 | 0.0 | 0 | 0 | 0 |
| W-1654 | 0 | 0.0 | 0 | 0 | 0 |
| W-1652 | 0 | 0.0 | 0 | 0 | 0 |
| W-1552 | 0 | 0.0 | 0 | 0 | 0 |
| W-1655 | 0 | 0.0 | 0 | 0 | 0 |
| W-1656 | 0 | 0.0 | 0 | 0 | 0 |
| W-1650 | 0 | 0.0 | 0 | 0 | 0 |
| W-HPA-002A | 0 | 0.0 | 0 | 0 | 0 |
| W-HPA-002H | 0 | 0.0 | 0 | 0 | 0 |
| Total: | <u>0</u> | 0.0 | | | |

4. Comments:

The treatment facility is shutdown due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action.

| 5. I certify that the in | formation in th | nis report, to | the best of my | knowledge, is true | e and correct |
|--------------------------|-----------------|----------------|----------------|-------------------------|---------------|
| Operator Signature: _ | Slatt | " (Curas | in G | Date: <u>07-31-2008</u> | |

Self-Monitoring Report LLNL Vapor Extraction System 07 (VES07) AREA VTFD-HPD

- 1. Reporting Period: Business Month August Year 2008
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

| Source | Monthly Volume(cu. ft) | Instantaneous Flow Rate(scfm) | P(in. Hg) | <u>T(°F)</u> | Hours of Op. |
|------------|------------------------|-------------------------------|-----------|--------------|--------------|
| W-1651 | 0 | 0.0 | 0 | 0 | 0 |
| W-1653 | 0 | 0.0 | 0 | 0 | 0 |
| W-1657 | 0 | 0.0 | . 0 | 0 | 0 |
| W-1654 | 0 | 0.0 | 0 | 0 | 0 |
| W-1652 | 0 | 0.0 | 0 | 0 | 0 |
| W-1552 | 0 | 0.0 | 0 | 0 | 0 |
| W-1655 | 0 | 0.0 | 0 | 0 | 0 |
| W-1656 | 0 | 0.0 | 0 | 0 | 0 |
| W-1650 | 0 | 0.0 | 0 | 0 | 0 |
| W-HPA-002 | A 0 | 0.0 | 0 | 0 | 0 |
| W-HPA-002I | 3 0 | 0.0 | 0 | 0 | 0 |
| Total: | <u>0</u> | 0.0 | | | |

4. Comments:

The treatment facility is shutdown due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action.

| 5. I certify that the information in | n this report, to the be | est of my knowledge, is true and correct |
|--------------------------------------|--------------------------|--|
| Operator Signature: | (Cawages 5 | Date: <u>09-02-2008</u> |
| | \mathcal{O} | |

Self-Monitoring Report LLNL Vapor Extraction System 07 (VES07) AREA VTFD-HPD

- 1. Reporting Period: Business Month <u>September</u> Year <u>2008</u>
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

August 30 31 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

| | Monthly | Instantaneous | | | Hours |
|---------------|---------------|-----------------|-----------|------------------------|--------|
| <u>Source</u> | Volume(cu. ft | Flow Rate(scfm) | P(in. Hg) | $\underline{T(^{o}F)}$ | of Op. |
| W-1651 | 0 | 0.0 | 0 | 0 | 0 |
| | · · | | - | v | |
| W-1653 | 0 | 0.0 | 0 | 0 | 0 |
| W-1657 | 0 | 0.0 | 0 | 0 | 0 |
| W-1654 | 0 | 0.0 | 0 | 0 | 0 |
| W-1652 | 0 | 0.0 | 0 | 0 | 0 |
| W-1552 | 0 | 0.0 | 0 | 0 | 0 |
| W-1655 | 0 | 0.0 | 0 | 0 | 0 |
| W-1656 | 0 | 0.0 | 0 | 0 | 0 |
| W-1650 | 0 | 0.0 | 0 | 0 | 0 |
| W-HPA-002 | A 0 | 0.0 | 0 | 0 | 0 |
| W-HPA-0021 | B 0 | 0.0 | 0 | 0 | 0 |
| Total: | <u>0</u> | 0.0 | | | |

4. Comments:

This treatment facility was shut down on 10-11-07 for a bioremediation test at this location. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

| 5. I certify that the informati | on in this report, to the bes | tof my knowledge, is true and correct |
|---------------------------------|-------------------------------|---|
| Operator Signature: | I Cawagu Co | of my knowledge, is true and correct Date: 10-09-2008 |

Self-Monitoring Report LLNL Vapor Extraction System 13 (VES13) AREA VTFD-HS

1. Reporting Period: Business Month July Year 2008

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

| Source | Monthly Volume(cu. ft | Instantaneous Flow Rate(scfm) | P(in. Hg) | | Hours of Op. | |
|--------|-----------------------|--------------------------------|-----------|---|-----------------|---|
| W-653 | 0 | 0.0 | 0 | 0 | 0 | |
| W-2102 | 0 | 0.0 | 0 | 0 | 0 | |
| W-2011 | 0 | 0.0 | 0 | 0 | 0 | |
| W-2101 | 0 | 0.0 | 0 | 0 | 0 | |
| Total: | <u>0</u> | 0.0 | | | | - |

4. Comments:

The treatment facility is shutdown due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-31-200

Self-Monitoring Report LLNL Vapor Extraction System 13 (VES13) AREA VTFD-HS

1. Reporting Period: Business Month <u>August</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

| | • | nstantaneous | | | lours | |
|---------------|------------------|----------------|-----------|----------------|-------|---|
| <u>Source</u> | Volume(cu. ft) F | low Rate(scfm) | P(in. Hg) | <u>T(°F)</u> o | f Op. | |
| W-653 | 0 | 0.0 | 0 | 0 | 0 | |
| W-2102 | 0 | 0.0 | 0 | 0 | 0 | |
| W-2011 | 0 | 0.0 | 0 | 0 | 0 | |
| W-2101 | 0 | 0.0 | 0 | 0 | 0 | |
| Total: | <u>0</u> | 0.0 | | | | - |

4. Comments:

The treatment facility is shutdown due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Low Curagua Cr. Date: 09-02-2008

Self-Monitoring Report LLNL Vapor Extraction System 13 (VES13) AREA VTFD-HS

- 1. Reporting Period: Business Month <u>September</u> Year <u>2008</u>
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

August 30 31 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

| | Monthly | Instantaneous | | H | Iours | |
|--------|---------------|-------------------|-----------|----------------|--|---|
| Source | Volume(cu. ft |) Flow Rate(scfm) | P(in. Hg) | <u>T(°F)</u> o | f Op. | |
| W-653 | 0 | 0.0 | 0 | 0 | 0 | |
| W-2102 | 0 | 0.0 | 0 | 0 | 0 | |
| W-2011 | 0 | 0.0 | 0 | 0 | 0 | |
| W-2101 | 0 | 0.0 | 0 | 0 | 0 | |
| | | | | | eoppes and management and discourse and an arrival discourse and an arrival discourse and an arrival discourse and arrival discourse arrival discourse and arrival discourse arrival discour | _ |
| Total: | <u>0</u> | <u>0.0</u> | | | | |

4. Comments:

This treatment facility was shut down on 6-7-07 due to a failed blower motor. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

| 5. I certify that the in | nfor mati on in th | iş report, | to the best of m | ny knowledge, is true and co | rrect |
|--------------------------|-------------------------------|------------|------------------|------------------------------|-------|
| Operator Signature: | Short | Caway | mCi | _ Date: <u>10-09-2008</u> | |

Self-Monitoring Report LLNL Portable Treatment Unit 3 (PTU3) AREA TFE-E

1. Reporting Period: Business Month <u>July</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): **0**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) |
|--------|---------------------|------------------------------|
| W-566 | 0 | 0.0 |
| W-1109 | 0 | 0.0 |
| W-1903 | 0 | 0.0 |
| W-1909 | 0 | 0.0 |
| W-2305 | 0 | 0.0 |
| Total: | 0 | 0.0 |

5. Discharge Information:

| Discharge Location | Water Station | Volume |
|--------------------|---------------|--------|
| Arroyo Las Positas | TFC-R003 | 0 |

6. Comments:

System shut down and was secured on 6/2/08 due to electronic (PLC) failure. Repairs pending.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 08-04-2008

Self-Monitoring Report LLNL Portable Treatment Unit 3 (PTU3) AREA TFE-E

1. Reporting Period: Business Month August Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) |
|--------|---------------------|------------------------------|
| W-566 | 0 | 0.0 |
| W-1109 | 0 | 0.0 |
| W-1903 | 0 | 0.0 |
| W-1909 | 0 | 0.0 |
| W-2305 | 0 | 0.0 |
| Total: | 0 | 0.0 |

5. Discharge Information:

| Discharge Location | Water Station | Volume |
|--------------------|---------------|--------|
| Arroyo Las Positas | TFC-R003 | 0 |

6. Comments:

System shut down and was secured on 6/2/08 due to electronic (PLC) failure. Repairs pending.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 09-02-2008

Self-Monitoring Report LLNL Portable Treatment Unit 3 (PTU3) AREA TFE-E

1. Reporting Period: Business Month <u>September</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 30 31 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): $\underline{0}$

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

| | Monthly | Instantaneous |
|--------|-------------|----------------|
| Source | Volume(gal) | Flow Rate(gpm) |
| W-566 | 0 | 0.0 |
| W-1109 | 0 | 0.0 |
| W-1903 | 0 | 0.0 |
| W-1909 | 0 | 0.0 |
| W-2305 | 0 | 0.0 |
| Total: | <u>0</u> | 0.0 |

5. Discharge Information:

| <u>Discharge Location</u> | Receiving Water Station | Volume |
|---------------------------|-------------------------|--------|
| Arroyo Las Positas | TFC-R003 | _0 |

6. Comments:

System shut down and was secured on 6/2/08 due to electronic (PLC) failure. Repairs pending.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 10-02-2008

Self-Monitoring Report LLNL GAC Treatment Unit 07 (GTU07) AREA TFE-HS

| 1. Reporting Per | iod: | Busi | ness | Moı | nth | <u>Ju</u> | ly | Year | 200 | 8 | | | | | | |
|---|----------|--------------------|------------|----------|----------|-----------|----------------|--------------|----------|----------------|----------|--------------|--------------|--------------|-----------|-----------|
| 2. Dates (in bole | d an | d <u>un</u> | derli | ne) | trea | ted g | groun | nd wa | ıter v | vas d | lisch | arge | d | | | |
| July | 01 16 | 02 17 | 03 18 | 04 19 | 05 20 | 06 21 | 07 22 | | 09 24 | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 30 | 31 |
| Total month | ly ti | me fa | acilit | у ор | erate | d (ho | ours) | : | <u>0</u> | | | | | | | |
| 3. Monthly Com | plia | nce I |)ata: | | | | | | | | | | | | | |
| Date compli Influent pH: Effluent pH: Effluent Ten | | | | | form | ned (1 | m/d/ | y): <u>N</u> | ot N | Ieası | ured | • | | | | |
| 4. Wellfield Data | a: | | | | | | | | | | | | | | | |
| Source | | Mon <u>Volu</u> | • | gal) | | | aneo late(g | us gpm) | | | | | | | | |
| W-2105 W-2012 | | | | 0 | | | 0.0 0.0 | | | | | | | | | |
| Total: | • | | | 0 | | | 0.0 | <u>)</u> | | | | | | | | |
| 5. Discharge Info | | | | | | | | | | eivii ter S | _ | <u>n</u> | <u>v</u> | Volu | <u>me</u> | |
| Arroyo | Las | Posi | <u>tas</u> | | | | | | <u>T</u> | FC- | R003 | 3 | | | _0 | |
| 6. Comments: System secoff. | cure | d 6/1 | 0/08 | due | to co | oncei | rns re | egarc | ling ` | W-20 |)12 p | oump | сус | ling | on a | nd |
| 7. I certify that the | ne in | form | atio | n in t | his r | epor | t, to | the b | est o | f my | kno | wlec | lge, i | s tru | e and | d correct |
| Operator Signatu | ıre: | Kl | W | | 4 | <u> </u> | 2 | _ | | Para Pro- | Dat | e: <u>08</u> | <u> -04-</u> | <u> 2008</u> | <u> </u> | |

Self-Monitoring Report LLNL GAC Treatment Unit 07 (GTU07) AREA TFE-HS

1. Reporting Period: Business Month <u>August</u> Year <u>2008</u> 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 Total monthly time facility operated (hours): 0 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm) W-2105 0 0.0 W-2012 0 0.0 Total: 0 0.05. Discharge Information: Receiving Discharge Location Water Station Volume Arroyo Las Positas TFC-R003 0 6. Comments: System secured 6/10/08 due to concerns regarding W-2012 pump cycling on and 7. I certify that the information in this report, to the best of my knowledge, is true and correct. Operator Signature: _ Date: **09-02-2008**

Self-Monitoring Report LLNL GAC Treatment Unit 07 (GTU07) AREA TFE-HS

| 1. Reporting Per | iod: | Busi | ness | Mor | nth | Se | pten | <u>ıber</u> | . Ye | ear <u>20</u> | 008 | | | | | |
|---|--------------|--------------------|------------|-------------|----------|----------------|------------|--------------|----------|-------------------|-------------|--------------|----------|--------------|-----------|--------|
| 2. Dates (in bol e | d and | d <u>un</u> | derli | <u>ne</u>) | trea | ted g | groun | d wa | iter v | vas d | isch | argeo | d | | | |
| August September | | | | 04 19 | 05 20 | 06 21 | | 08 23 | 09 24 | | 11 26 | 12 27 | 13 28 | 14 29 | 15 30 | |
| Total month | ly tiı | me fa | acilit | у ор | erate | d (ho | ours) | : | <u>0</u> | | | | | | | |
| 3. Monthly Com | pliar | nce I |)ata: | | | | | | | | | | | | | |
| Date compli Influent pH: Effluent pH: Effluent Ten | | | - | _ | form | ned (1 | m/d/ | y): <u>N</u> | lot M | <u> 1eas</u> | <u>ıred</u> | | | | | |
| 4. Wellfield Data | a: | | | | | | | | | | | | | | | |
| Source | | Mon <u>Volu</u> | • | gal) | | stanta ow R | | | | | | | | | | |
| W-2105 W-2012 | | | | 0 0 | | | 0.0 0.0 | | | | | | | | | |
| Total: | • | | | 0 | | | 0.0 | <u>)</u> | | | | | | | | |
| 5. Discharge Info | orma | ition: | | | | | | | _ | | | | | | | |
| Discharge | Loc | ation | | | | | | | | ceivii ter S | _ | <u>n</u> | Ž | Volu | <u>ne</u> | |
| Arroyo | Las | Posi | <u>tas</u> | | | | | | <u>T</u> | 'FC- | R003 | 3 | | - | _0 | |
| 6. Comments: System seconff. | cure | d 6/1 | 0/08 | due | to co | oncei | rns ro | egarc | ling ` | W-20 |)12 բ | oump | сус | ling | on and | |
| 7. I certify that the | ne in | form | atio | ı in t | his r | epor | t, to | the b | est o | f my | kno | wled | lge, i | s tru | e and o | orrect |
| Operator Signatu | ıre: | 1/1 | II (| // | 1 | 1 | _ | | | të i kashun qadan | Dat | e: <u>10</u> | -02- | <u> 2008</u> | | |

Self-Monitoring Report LLNL Portable Treatment Unit 9 (PTU9) AREA TFE-NW

| 1. Reporting Perio | od: Business Month | July Year | 2008 | |
|------------------------------|---|---|---|---|
| 2. Dates (in bold | and <u>underline</u>) trea | ated ground wa | ater was discharged | 1 |
| July <u>(</u> | 01 02 03 04 05 16 17 18 19 20 | $\frac{06}{21} \frac{07}{22} \frac{08}{23}$ | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $\frac{13}{28} \frac{14}{29} \frac{15}{30} \frac{31}{31}$ |
| Total monthly | y time facility operate | ed (hours): | <u>761</u> | |
| 3. Monthly Comp | liance Data: | | | |
| Influent pH: Effluent pH: | nce sampling perforn perature (°C): | ned (m/d/y): | $ \begin{array}{r} \underline{07-15-2008} \\ \underline{7.5} \\ \underline{7.5} \\ \underline{21} \end{array} $ | |
| 4. Wellfield Data: | | | | |
| Source | • | stantaneous ow Rate(gpm) | 1 | |
| W-1211 W-1409 | 875,367 0 | 19.4 0.0 | | |
| Total: | 875,367 | <u>19.4</u> | | |
| 5. Discharge Info | rmation: | | | |
| Discharge I | Location | | Receiving Water Station | Volume |
| Arroyo L | as Positas | | TFC-R003 | 875,367 |
| 6. Comments: W-1409 we | ll pump failed on 5/6 | /08, repairs pe | ending. | |
| 7. I certify that the | e information in this i | eport, to the b | est of my knowled | ge, is true and correct |
| Operator Signatur | e: <i>//////</i> | | Date: 08 | -04-2008 |

Self-Monitoring Report LLNL Portable Treatment Unit 9 (PTU9) AREA TFE-NW

| 1. Reporting Peri | iod: Business Mor | nth <u>August</u> Y | ear <u>2008</u> | | |
|---------------------------------------|---|--|---|---|-------|
| 2. Dates (in bold | and <u>underline</u>) | treated ground wa | ter was discharged | 1 | |
| August | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | $\frac{09}{24} \ \frac{10}{25} \ \frac{11}{26} \ \frac{12}{27}$ | $\frac{13}{28} \frac{14}{29} \frac{15}{29}$ | |
| Total monthl | ly time facility ope | erated (hours): | <u>703</u> | | |
| 3. Monthly Comp | pliance Data: | | | | |
| Influent pH: Effluent pH: | ance sampling per | formed (m/d/y): | $ \begin{array}{r} \underline{08-08-2008} \\ \underline{7.5} \\ \underline{7.5} \\ \underline{21.5} \end{array} $ | | |
| 4. Wellfield Data | ı: · | | | | |
| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) | | | |
| W-1211 W-1409 | 812,675 0 | 19.5 0.0 | | | |
| Total: | 812,675 | <u>19.5</u> | | | |
| 5. Discharge Info | | | Receiving Water Station | <u>Volume</u> | |
| _Arroyo l | Las Positas | | TFC-R003 | 812,675 | |
| 6. Comments: | | | | | |
| 7. I certify that th Operator Signatu | Vanl | his report, to the b | | ge, is true and con | rrect |
| 1 | 1000 | / | | | |

Self-Monitoring Report LLNL Portable Treatment Unit 9 (PTU9) AREA TFE-NW

1. Reporting Period: Business Month September Year 2008 2. Dates (in **bold** and underline) treated ground water was discharged August 30 31 September <u>01</u> <u>02</u> <u>03</u> <u>04</u> <u>05</u> <u>06</u> <u>07</u> <u>08</u> <u>09</u> <u>10</u> <u>11</u> <u>12</u> <u>13</u> <u>14</u> <u>15</u> <u>16 17 18 19 20 21 22 23 24 25 26 27 28 29 30</u> Total monthly time facility operated (hours): 783 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): 09-10-2008 <u>7.5</u> Influent pH: <u>7.0</u> Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm) W-1211 906,034 19.5 W-1409 0.0 0 Total: 906,034 19.5 5. Discharge Information: Receiving Discharge Location Water Station **Volume** Arroyo Las Positas 906,034 TFC-R003 6. Comments: W-1409 well pump failed on 5/6/08, repairs pending. 7. I certify that the information in this report, to the best of my knowledge, is true and correct. Operator Signature: _ Date: 10-02-2008

Self-Monitoring Report LLNL Mini Treatment Unit 04 (MTU04) AREA TFE-SE

1. Reporting Period: Business Month <u>July</u> Year <u>2008</u>

| 2. Dates (in bol | d and | une | derli | <u>ne</u>) | trea | ted g | grour | ıd wa | ater v | vas d | isch | arge | d | | | | |
|---|--------------|----------------|-------|-------------|--|-------------------|----------------|--------------|-----------|-----------------|-------------|----------|----------|----------|-----------|----|--|
| July | | 02 17 | | 04 19 | 05 20 | 06 21 | | 08 23 | | | 11 26 | 12 27 | 13 28 | 14 29 | 15 30 | 31 | |
| Total month | ıly tim | ne fa | cilit | у ор | erate | d (h | ours) | : _ | <u>0</u> | | | | | | | | |
| 3. Monthly Com | plian | ce D | ata: | | | | | | | | | | | | | | |
| Date compli Influent pH: Effluent pH: Effluent Ter | : : | | | _ | form | ned (| m/d/ | y): <u>N</u> | lot M | <u> 1eas</u> | ured | | | | | | |
| 4. Wellfield Dat | a: | | | | | | | | | | | | | | | | |
| Source | | Mont Volu | • | gal) | | | aneo Late(g | us gpm) | | | | | | | | | |
| W-359 | | | | 0 | | | 0.0 | 0 | | | | | | | | | |
| Total: | _ | | | 0 | THE PERSON NAMED OF THE PE | er en sentent von | 0.0 | <u>0</u> | | | | | | | | | |
| 5. Discharge Info | ormat | tion: | | | | | | | D - | • • | | | | | | | |
| Discharge | Loca | <u>ition</u> | | | | | | | | ceivi iter S | _ | <u>n</u> | Ž | Volu: | <u>me</u> | | |
| _Arroyo | Las I | Posit | tas | | | | | | <u>_T</u> | FC- | <u>R00:</u> | <u>3</u> | | | _0 | | |
| 6. Comments: Facility fa pump has facility wi the month | not be | een i resta | repla | aced | and | the f | acili | ty ha | s not | ope | rated | sinc | e 4/2 | 2/08. | This | 1 | |
| | 01 3 4 | | | | | | | | | | | | | | | | |

Self-Monitoring Report LLNL Mini Treatment Unit 04 (MTU04) AREA TFE-SE

1. Reporting Period: Business Month <u>August</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

| 1 | 1 02 6 17 | 03 18 | 04 19 | 05 20 | 06 21 | 07 22 | 08 23 | 09 24 | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 | |
|--|--------------|---------------|----------|----------|----------|----------|--------------|----------|----------------|-------------|----------|----------|----------|-----------|--|
| Total monthly | time f | acilit | у оре | erate | d (ho | ours) | : _ | <u>0</u> | | | | | | | |
| 3. Monthly Compl | iance I | Data: | | | | | | | | | | | | | |
| Date complian Influent pH: Effluent pH: Effluent Temp | | | | form | ed (r | n/d/y | y): <u>N</u> | ot N | <u>Ieası</u> | <u>ired</u> | | | | | |
| 4. Wellfield Data: | | | | | | | | | | | | | | | |
| Source | Mor Volu | thly ime(g | gal) | | tanta | | | | | | | | | | |
| W-359 | | | 0 | | | 0.0 |) | | | | | | | | |
| Total: | * | | 0 | | | 0.0 | <u>)</u> | | | | | | | | |
| 5. Discharge Inform | nation | : | | | | | | D | | | | | | | |
| Discharge Lo | ocation | <u>1</u> | | | | | | | eivir ter S | _ | <u>n</u> | Z | /olur | <u>ne</u> | |
| | | | | | | | | | | | | | | | |
| Arroyo La | s Posi | tas | | | | | | <u>T</u> | FC-l | R003 | <u>3</u> | | - | _0 | |

Self-Monitoring Report LLNL Mini Treatment Unit 04 (MTU04) AREA TFE-SE

| 1. Reporting Per | iod: | Busi | ness | Mo | nth | <u>Se</u> | <u>pten</u> | <u>ıber</u> | - Ye | ear <u>2</u> | <u>008</u> | | | | | |
|--|----------------|--------------------|----------------|-------------|----------|------------------|----------------|---------------|----------|-----------------|-----------------|--------------|-------------|----------|-----------|---------|
| 2. Dates (in bole | d an | d <u>un</u> | derli | ine) | trea | ted g | groun | ıd wa | ater v | vas č | lisch | argeo | d | | | |
| August September | 30 01 16 | 31 02 17 | 03 18 | 04 19 | 05 20 | 06 21 | 07 22 | | 09 24 | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 30 | |
| Total month | ly ti | me fa | acilit | у ор | erate | d (h | ours) | : _ | 0 | | | | | | | |
| 3. Monthly Com | plia | nce I |)ata: | | | | | | | | | | | | | |
| Date complications Influent pH: Effluent pH: Effluent Ten | | | - | | form | ied (; | m/d/ | y): <u>N</u> | lot M | <u>Ieas</u> | <u>ured</u> | | | | | |
| 4. Wellfield Data | a: | | | | | | | | | | | | | | | |
| Source | | Mon <u>Volu</u> | - | gal) | | | aneo ate(g | | | | | | | | | |
| W-359 | | | | 0 | | | 0.0 |) | | | | | | | | |
| Total: | • | | | <u>0</u> | | | 0.0 | <u>)</u> | | | | | | | | |
| 5. Discharge Info | orma | ation | : | | | | | | ъ | | | | | | | |
| Discharge | Loc | ation | <u>l</u> | | | | | | | ceivi iter S | ng tatio | <u>n</u> | 7 | Volu | <u>me</u> | |
| Arroyo | Las | Posi | <u>tas</u> | | | | | | <u>T</u> | FC- | R003 | <u>3</u> | | • | _0 | |
| 6. Comments: Facility fair pump has facility will restart. Fac | not l ll be | oeen resta | repla arted | aced onc | and the | the f pun | acilit p is | y ha repla | s not | operand t | rated the fa | sinc | e 4/2 | 2/08. | The | |
| 7. I certify that the | ne in | for n | atio | n in 1 | this r | epo r | t, to | the b | est c | of my | kno | wlec | lge, i | is tru | e and | correct |
| Operator Signatu | ıre: | J. | 4 | A | (h. | ร์บา | _ | W | | , | Dat | e: <u>10</u> | <u>-01-</u> | 2008 | <u> </u> | |

Self-Monitoring Report LLNL Mini Treatment Unit 03 (MTU03) AREA TFE-SW

1. Reporting Period: Business Month <u>July</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

July <u>01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 </u>

Total monthly time facility operated (hours): <u>741</u>

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>07-01-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.0</u> |
| Effluent pH: | <u>7.5</u> |
| Effluent Temperature (°C): | <u>19.6</u> |

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) |
|--------|---------------------|------------------------------|
| W-1520 | 0 | 0.0 |
| W-1518 | 78,877 | 1.8 |
| W-1522 | 61,459 | 1.4 |
| Total: | 140,336 | 3.2 |

5. Discharge Information:

| D'alamatan' | Receiving | X 7 1 |
|--------------------|---------------|--------------|
| Discharge Location | Water Station | Volume |
| Arrovo Las Positas | TFC-R003 | 140,336 |

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 08-05-2008

Self-Monitoring Report LLNL Mini Treatment Unit 03 (MTU03) AREA TFE-SW

1. Reporting Period: Business Month August Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): _693

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>08-01-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.5</u> |
| Effluent pH: | 7.5 |
| Effluent Temperature (°C): | <u>21.7</u> |

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) |
|--------|---------------------|------------------------------|
| W-1520 | 0 | 0.0 |
| W-1518 | 71,696 | 1.8 |
| W-1522 | 56,829 | 1.4 |
| Total: | 128,525 | 3.2 |

5. Discharge Information:

| Discharge Location | Receiving Water Station | Volume |
|--------------------|----------------------------|---------|
| Arroyo Las Positas | TFC-R003 | 128,525 |

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 09-02-2008

Self-Monitoring Report LLNL Mini Treatment Unit 03 (MTU03) AREA TFE-SW

1. Reporting Period: Business Month <u>September</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

Total monthly time facility operated (hours): __770

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>09-10-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.0</u> |
| Effluent pH: | <u>7.5</u> |
| Effluent Temperature (°C): | 19.2 * |

4. Wellfield Data:

| | Monthly | Instantaneous |
|---------------|---------------|----------------|
| Source Source | Volume(gal) | Flow Rate(gpm) |
| W-1520 | 0 | 0.0 |
| W-1518 | 11,397 | 0.0 |
| W-1522 | 61,026 | 1.3 |
| | | |
| Total: | <u>72,423</u> | <u>1.3</u> |

5. Discharge Information:

| | Receiving | |
|--------------------|---------------|---------------|
| Discharge Location | Water Station | <u>Volume</u> |
| Arroyo Las Positas | TFC-R003 | 72,423 |

6. Comments:

W-1518 was discovered non operational on 9/8/08. Unable to restart pump.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: The Date: 10-01-2008

Self-Monitoring Report LLNL Mini Treatment Unit 05 (MTU05) AREA TFE-W

1. Reporting Period: Business Month <u>July</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): <u>741</u>

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>07-01-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.5</u> |
| Effluent pH: | <u>7.0</u> |
| Effluent Temperature (°C): | <u>21.3</u> |

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) |
|----------------|------------------------|------------------------------|
| W-292 W-305 | 270,757 407,136 | 6.1 9.2 |
| Total: | 677,893 | 15.3 |

5. Discharge Information:

| Arroyo Las Positas | TFC-R003 | 677,893 |
|--------------------|---------------|---------|
| Discharge Location | Water Station | Volume |
| | Receiving | |

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 08-04-2008

Self-Monitoring Report LLNL Mini Treatment Unit 05 (MTU05) AREA TFE-W

1. Reporting Period: Business Month <u>August</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): <u>645</u>

3. Monthly Compliance Data:

| Date compliance sampling performed (m/d/y): | <u>08-01-2008</u> |
|---|-------------------|
| Influent pH: | <u>7.0</u> |
| Effluent pH: | <u>7.5</u> |
| Effluent Temperature (°C): | <u>19.6</u> |

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) | | |
|----------------|---------------------|------------------------------|--|--|
| W-305 W-292 | 350,649 241,077 | 9.2 6.0 | | |
| Total: | <u>591,726</u> | 15.2 | | |

5. Discharge Information:

| _Arroyo Las Positas | TFC-R003 | 591,726 | |
|---------------------|---------------|---------|--|
| Discharge Location | Water Station | Volume | |

6. Comments:

Due to construction activities in the area- Electrical power to MTU05 was not available from the morning of 8/28 to the morning of 8/29.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 09-02-2008

Self-Monitoring Report LLNL Mini Treatment Unit 05 (MTU05) AREA TFE-W

1. Reporting Period: Business Month <u>September</u> Year <u>2008</u> 2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged August September <u>01</u> <u>02</u> <u>03</u> <u>04</u> <u>05</u> <u>06</u> <u>07</u> <u>08</u> <u>09</u> <u>10</u> <u>11</u> <u>12</u> <u>13</u> <u>14</u> <u>15</u> <u>16</u> <u>17</u> <u>18</u> <u>19</u> <u>20</u> <u>21</u> <u>22</u> <u>23</u> <u>24</u> <u>25</u> <u>26</u> <u>27</u> <u>28</u> <u>29</u> <u>30</u> Total monthly time facility operated (hours): 769 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): 09-10-2008 7<u>.0</u> Influent pH: 7.5 Effluent pH: Effluent Temperature (°C): 20.6 4. Wellfield Data: Monthly Instantaneous Volume(gal) Flow Rate(gpm) Source W-305 407,067 8.8 W-292 285,340 6.2 Total: 692,407 15.0 5. Discharge Information: Receiving Discharge Location Water Station Volume 1 Arroyo Las Positas TFC-R003 692,407 6. Comments: 7. I certify that the information in this report, to the best of my knowledge, is true and correct. Operator Signature: Date: 10-01-2008

Self-Monitoring Report LLNL Vapor Extraction System 16 (VES16) AREA VTFE-ELM

- 1. Reporting Period: Business Month July Year 2008
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

| | Monthly I | nstantaneous | | H | lours | |
|------------|------------------|-----------------|-----------|----------------|-------|--|
| Source | Volume(cu. ft) I | Flow Rate(scfm) | P(in. Hg) | <u>Γ(°F)</u> ο | f Op. | |
| W-1909 | 0 | 0.0 | 0 | 0 | 0 | |
| W-1903 | 0 | 0.0 | 0 | 0 | 0 | |
| W-2305 | 0 | 0.0 | 0 | 0 | . 0 | |
| W-543-003 | 0 | 0.0 | 0 | 0 | 0 | |
| W-543-001 | 0 | 0.0 | 0 | 0 | 0 | |
| W-543-1908 | 0 | 0.0 | 0 | 0 | 0 | |
| Total: | <u>0</u> | 0.0 | | | | |

4. Comments:

The treatment facility is shutdown due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: <u>08-04-2008</u>

Self-Monitoring Report LLNL Vapor Extraction System 16 (VES16) AREA VTFE-ELM

1. Reporting Period: Business Month <u>August</u> Year <u>2008</u>

2. Dates (in **bold** and underline) treatment facility operated

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

| | Monthly In | Instantaneous Hours | | | | | | |
|------------|------------------|---------------------|-----------|----------------|-------|--|--|--|
| Source | Volume(cu. ft) F | low Rate(scfm) | P(in. Hg) | <u>Γ(°F)</u> ο | f Op. | | | |
| W-1909 | 0 | 0.0 | 0 | 0 | 0 | | | |
| W-1903 | 0 | 0.0 | 0 | 0 | 0 | | | |
| W-2305 | 0 | 0.0 | 0 | 0 | 0 | | | |
| W-543-003 | 0 | 0.0 | 0 | 0 | 0 | | | |
| W-543-001 | 0 | 0.0 | 0 | 0 | 0 | | | |
| W-543-1908 | 0 | 0.0 | 0 | 0 | 0 | | | |
| Total: | <u>0</u> | 0.0 | | | | | | |

4. Comments:

The treatment facility is shutdown due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 09-03-2008

Self-Monitoring Report LLNL Vapor Extraction System 16 (VES16) AREA VTFE-ELM

1. Reporting Period: Business Month September Year 2008

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

August 30 31 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

| | Monthly | Instantaneous | Hours | | | | | | |
|------------|---------------|-------------------|-----------|----------------|--------|--|--|--|--|
| Source | Volume(cu. ft |) Flow Rate(scfm) | P(in. Hg) | <u>Γ(°F)</u> ο | of Op. | | | | |
| W-1909 | 0 | 0.0 | 0 | 0 | 0 | | | | |
| W-1903 | 0 | 0.0 | 0 | 0 | 0 | | | | |
| W-2305 | 0 | 0.0 | 0 | 0 | 0 | | | | |
| W-543-003 | 0 | 0.0 | 0 | 0 | 0 | | | | |
| W-543-001 | 0 | 0.0 | 0 | 0 | 0 | | | | |
| W-543-1908 | 0 | 0.0 | 0 | 0 | 0 | | | | |
| | | | | | | | | | |
| Total: | <u>0</u> | $\underline{0.0}$ | | | | | | | |

4. Comments:

This treatment facility was shut down on 2/06/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 10-30-2008

Self-Monitoring Report LLNL Vapor Extraction System 12 (VES12) AREA VTFE-HS

- 1. Reporting Period: Business Month July Year 2008
- 2. Dates (in **bold** and underline) treatment facility operated

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

| | Monthly | y Inst | tantaneous | | H | Hours | | | |
|---------------|------------|---------------|--------------|-----------|------------------------|-------|--|--|--|
| <u>Source</u> | Volume | e(cu. ft) Flo | w Rate(scfm) | P(in. Hg) | P(in. Hg) T(°F) of Op. | | | | |
| W-ETS-201 | 10B | 0 | 0.0 | 0 | 0 | 0 | | | |
| W-ETS-201 | 10A | 0 | 0.0 | 0 | 0 | 0 | | | |
| W-ETS-200 |)9 | 0 | 0.0 | 0 | 0 | 0 | | | |
| W-ETS-200 | 08A | 0 | 0.0 | 0 | 0 | 0 | | | |
| W-ETS-200 |)8B | 0 | 0.0 | 0 | 0 | 0 | | | |
| W-2105 | | 0 | 0.0 | 0 | 0 | 0 | | | |
| Total: | | <u>0</u> | 0.0 | | | | | | |

4. Comments:

Facility did not operate in the month of July 2008. Facility failed on 3/10/08 due to a catastrophic motor failure in the liquid ring vacuum pump. Facility will not be restarted due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 08-04-2008

Self-Monitoring Report LLNL Vapor Extraction System 12 (VES12) AREA VTFE-HS

- 1. Reporting Period: Business Month <u>August</u> Year <u>2008</u>
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

| | Monthly | | Hours | | | | | |
|------------|---------------|-------------------|-----------|---|---|--|--|--|
| Source | Volume(cu. ft |) Flow Rate(scfm) | P(in. Hg) | $\underline{P(in. Hg)} \ \underline{T(^{o}F)} \ \underline{of Op.}$ | | | | |
| W-ETS-2010 |)B 0 | 0.0 | 0 | 0 | 0 | | | |
| W-ETS-2010 | 0 O | 0.0 | 0 | 0 | 0 | | | |
| W-ETS-2009 | 0 | 0.0 | 0 | 0 | 0 | | | |
| W-ETS-2008 | SA 0 | 0.0 | 0 | 0 | 0 | | | |
| W-ETS-2008 | 3B 0 | 0.0 | 0 | 0 | 0 | | | |
| W-2105 | 0 | 0.0 | 0 | 0 | 0 | | | |
| Total: | <u>0</u> | 0.0 | | | | | | |

4. Comments:

Facility did not operate in the month of August 2008. Facility failed on 3/10/08 due to a catastrophic motor failure in the liquid ring vacuum pump. Facility will not be restarted due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 09-02-2008

Self-Monitoring Report LLNL Vapor Extraction System 12 (VES12) AREA VTFE-HS

1. Reporting Period: Business Month <u>September</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

August 30 31 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

| | Monthly | Instantaneous | Hours | | | | | |
|------------|--------------|--------------------|-----------|-------------------|--------|--|--|--|
| Source | Volume(cu. f | t) Flow Rate(scfm) | P(in. Hg) | $\Gamma(^{o}F)$ o | of Op. | | | |
| W-ETS-2010 |)B 0 | 0.0 | 0 | 0 | 0 | | | |
| W-ETS-2010 |)A 0 | 0.0 | 0 | 0 | 0 | | | |
| W-ETS-2009 | 0 | 0.0 | 0 | 0 | 0 | | | |
| W-ETS-2008 | BA 0 | 0.0 | 0 | 0 | 0 | | | |
| W-ETS-2008 | 3B 0 | 0.0 | 0 | 0 | 0 | | | |
| W-2105 | 0 | 0.0 | 0 | 0 | 0 | | | |
| Total: | <u>0</u> | 0.0 | | | | | | |

4. Comments:

Facility did not operate in the month of Sept. 2008. Facility failed on 3/10/08 due to a catastrophic motor failure in the liquid ring vacuum pump. DOE and the regulatory agencies were notified of this action.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature. Date: 10-01-2008

Self-Monitoring Report LLNL GAC Treatment Unit 01 (GTU01) AREA TFG-1

| 1. Reporting Per | riod: Business Mor | nth <u>July</u> | Year <u>200</u> | <u>8</u> | | | | | |
|-----------------------------|---|-----------------|------------------------|--------------------------------|----------|----|-------|-----------|-----------|
| 2. Dates (in bol | d and underline) | treated groun | nd water v | vas disch | argeo | d | | | |
| July | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | | | | | | | <u>31</u> |
| Total month | ly time facility ope | erated (hours) | : <u>746</u> | | | | | | |
| 3. Monthly Com | pliance Data: | | | | | | | | |
| Influent pH: Effluent pH | mperature (°C): | formed (m/d/ | y): <u>07</u> | -15-2008 7.0 7.0 18.8 | • | | | | |
| | Monthly | Instantaneo | 110 | | | | | | |
| Source | Volume(gal) | Flow Rate(s | | | | | | | |
| W-1111 | 397,206 | 8.8 | 3 | | | | | | |
| Total: | 397,206 | 8.3 | <u>3</u> | | | | | | |
| 5. Discharge Info | ormation: | | | | | | | | |
| Discharge | Location | | | ceiving ter Statio | <u>n</u> | Z | olum/ | <u>ne</u> | |
| Arroyo | Seco | | <u>_T</u> | FG-ASV | <u>V</u> | _3 | 97,20 | <u>)6</u> | |
| 6. Comments: | | | | | | | | | |
| | | | | | | | | | |

Self-Monitoring Report LLNL GAC Treatment Unit 01 (GTU01) AREA TFG-1

| 2. Dates (in bold and <u>underline</u>) treated ground water was discharged August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 Total monthly time facility operated (hours): 690 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): 08-08-2008 Influent pH: 7.0 Effluent Temperature (°C): 18.8 4. Wellfield Data: Monthly Instantaneous Volume(gal) Flow Rate(gpm) W-1111 367,566 8.8 Total: 367,566 8.8 Total: 367,566 8.8 Total: Treatment Information: Receiving Water Station Volume Arroyo Seco TFG-ASW 367,566 6. Comments: Date: 09-03-2008 | 1. Reporting Period | : Business Mon | th <u>August</u> Yo | ear <u>2008</u> | |
|--|------------------------------|---|---|---|---|
| Total monthly time facility operated (hours):690 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y):08-08-2008 | 2. Dates (in bold an | nd <u>underline</u>) | treated ground wa | ter was discharged | |
| 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): 08-08-2008 Influent pH: 7.0 Effluent pH: 7.0 Effluent Temperature (°C): 18.8 4. Wellfield Data: Monthly Instantaneous Flow Rate(gpm) W-1111 367,566 8.8 Total: 367,566 8.8 5. Discharge Information: Discharge Location Water Station Volume Arroyo Seco TFG-ASW 367,566 6. Comments: 7. I certify that the information in this report, to the best of my knowledge, is true and correct | August <u>01</u> <u>16</u> | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $ \begin{array}{c cccc} $ | $ \begin{array}{c cccc} $ | $\frac{13}{28} \frac{14}{29} \frac{15}{29}$ |
| Date compliance sampling performed (m/d/y): Influent pH: Effluent pH: Effluent Temperature (°C): Monthly Volume(gal) W-1111 367,566 8.8 Total: Discharge Information: Physical Arroyo Seco TFG-ASW 7.0 18.8 Receiving Water Station Water Station Volume TFG-ASW TFG-ASW Total: TFG-ASW TFG | Total monthly t | ime facility ope | erated (hours): | <u>590</u> | |
| Influent pH: Effluent pH: Effluent pH: Effluent Temperature (°C): 18.8 4. Wellfield Data: Monthly | 3. Monthly Complia | ance Data: | | | |
| Monthly Instantaneous Flow Rate(gpm) | Influent pH: Effluent pH: | 1 01 | Formed (m/d/y): | $\frac{7.0}{7.0}$ | |
| Source Volume(gal) Flow Rate(gpm) W-1111 367,566 8.8 Total: 367,566 8.8 5. Discharge Information: Particle Point | 4. Wellfield Data: | | | | |
| Total: 367,566 8.8 5. Discharge Information: Receiving Discharge Location Water Station Volume Arroyo Seco TFG-ASW 367,566 6. Comments: 7. I certify that the information in this report, to the best of my knowledge, is true and correct | <u>Source</u> | • | | | |
| 5. Discharge Information: Receiving Water Station Volume Arroyo Seco TFG-ASW 367,566 6. Comments: 7. I certify that the information in this report, to the best of my knowledge, is true and correc | W-1111 | 367,566 | 8.8 | | |
| Pischarge Location Mater Station Arroyo Seco TFG-ASW 367,566 6. Comments: 7. I certify that the information in this report, to the best of my knowledge, is true and corrections. | Total: | 367,566 | <u>8.8</u> | | |
| <u>Arroyo Seco</u> TFG-ASW 367,566 6. Comments: 7. I certify that the information in this report, to the best of my knowledge, is true and correct | 5. Discharge Inform | ation: | | . | |
| 6. Comments: 7. I certify that the information in this report, to the best of my knowledge, is true and correct | Discharge Lo | cation | | • | <u>Volume</u> |
| 7. I certify that the information in this report, to the best of my knowledge, is true and correct | Arroyo Sec | <u>o</u> | | TFG-ASW | 367,566 |
| | 6. Comments: | | | | |
| | | \/ma// | gis report, to the be | | |
| | / | | | | |

Self-Monitoring Report LLNL GAC Treatment Unit 01 (GTU01) AREA TFG-1

| 1. Reporting Per | iod: Business Month | September | Year <u>2008</u> | |
|--|---|--|---|---|
| 2. Dates (in bole | d and <u>underline</u>) tre | ated ground wat | er was discharged | d |
| August September | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $\frac{6}{21} \frac{06}{21} \frac{07}{22} \frac{08}{23}$ | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $\frac{13}{28} \frac{14}{29} \frac{15}{30}$ |
| Total month | ly time facility operat | ed (hours):7 | 68 | |
| 3. Monthly Com | pliance Data: | | | |
| Influent pH: Effluent pH: | ance sampling performance sampling performance (°C): | med (m/d/y): | 09-10-2008 7.0 7.0 18.5 | |
| 4. Wellfield Data | a: | | | |
| Source | • | nstantaneous low Rate(gpm) | | |
| W-1111 | 409,744 | 8.9 | | |
| Total: | 409,744 | 8.9 | | |
| 5. Discharge Info | ormation: | | Description | |
| Discharge | Location | | Receiving Water Station | Volume |
| Arroyo | Seco | | TFG-ASW | 409,744 |
| 6. Comments: | | | | |
| 7. I certify that the Operator Signature | | report, to the be | st of my knowled Date: <u>10</u> | lge, is true and correct |
| | | | | |

Land Observation Report date: TFG-ASW - Arroyo Seco

1. Reporting Period: Business Month <u>July</u> Year <u>2008</u>

| 2. | Date compliance sampling performed <u>07-15-2008</u> | | | | | | | | | |
|----|---|--|---|--|--|--|--|--|--|--|
| 3. | Weather Conditions: | | | | | | | | | |
| | Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph): | 21.5 0 6/ SW | | | | | | | | |
| 4. | Receiving Data: | | | | | | | | | |
| | Sample Location pH Temperature (C) Receiving Water N/M N/M | | | | | | | | | |
| 5. | 5. Land Observations, as "Yes" or "No", for reporting month: | | | | | | | | | |
| | <u>Visual Observations</u> | <u>Effluent</u> | Receiving Water | | | | | | | |
| | Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use | No No Not Required Not Required | <u>No</u> <u>No</u> <u>No</u> <u>N/A</u> | | | | | | | |
| 6. | Comments: No water at sampling location, semi-annual samp | ling delayed until fl | ow restored. | | | | | | | |
| 7. | I certify that the information in this report, to the bes | st of my knowledge, i | s true and correct. | | | | | | | |
| | Operator Signature: | Date: 08-0 | 4-2008 | | | | | | | |

Land Observation Report date: TFG-ASW - Arroyo Seco

| 1. | Reporting Period: Business Month August Year 20 | 008 | |
|----|---|------------------------------------|---|
| 2. | Date compliance sampling performed <u>08-08-2008</u> | | |
| 3. | Weather Conditions: | | |
| | Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph): | 18.2 0 6/ SW | |
| 4. | Receiving Data: | | |
| | Sample Location pH Temperature (C) Receiving Water N/M N/M | | |
| 5. | Land Observations, as "Yes" or "No", for reporting a | month: | |
| | Visual Observations | <u>Effluent</u> | Receiving Water |
| | Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use | No Not Required Not Required | <u>No</u> <u>No</u> <u>No</u> <u>N/A</u> |
| 6. | Comments: | | |
| 7. | I certify that the information in this report, to the bes | st of my knowledge, | is true and correct. |
| | Operator Signature: | Date: 09-0 | 3-2008 |

Land Observation Report date: TFG-ASW - Arroyo Seco

1. Reporting Period: Business Month **September** Year **2008**

| 2. | Date compliance sampling performed <u>09-10-2008</u> | | |
|----|---|--|---|
| 3. | Weather Conditions: | | |
| | Average air tempertaure (°C): 6-day total precipitation (in): Average wind speed/direction (mph): | 22.2 0 4/ SSW | |
| 4. | Receiving Data: | | |
| | Sample Location pH Temperature (C) | | |
| | Receiving Water N/M N/M | | |
| 5. | Land Observations, as "Yes" or "No", for reporting i | month: | |
| | Visual Observations | Effluent | Receiving Water |
| | Floating and Suspended Materials of Waste Origin Odor Discoloration and Turbidity Evidence of Beneficial Water Use | No Not Required Not Required | <u>No</u> <u>No</u> <u>No</u> <u>N/A</u> |
| 6. | Comments: | | |
| 7. | I certify that the information in this report, to the best Operator Signature | st of my knowledge, i Date: <u>10-0</u> | |
| | | | |

Self-Monitoring Report LLNL Mini Treatment Unit 02 (MTU02) AREA TFG-N

| 1. Reporting Per | iod: | Busi | ness | Mor | nth | Ju | ly | Year | 200 | 8 | | | | | | |
|---|-------------|--------------------|------------|----------|----------|----------|----------------|--------------|----------|-----------------------|----------|---------------|---------------|----------|-----------|-----------|
| 2. Dates (in bol | d an | d <u>un</u> | derli | ne) | trea | ted g | grour | nd wa | ater v | vas d | isch | arge | d | | | |
| July | 01 16 | 02 17 | 03 18 | 04 19 | 05 20 | 06 21 | 07 22 | 08 23 | | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 30 | 31 |
| Total month | ly tii | me fa | acilit | у ор | erate | d (h | ours) |): _ | <u>0</u> | | | | | | | |
| 3. Monthly Com | plia | nce I | Data: | | | | | | | | | | | | | |
| Date compli Influent pH: Effluent pH: Effluent Ter | | | | | form | ned (| m/d/ | y): <u>N</u> | Not M | Ieası | ured | | | | | |
| 4. Wellfield Data | a: | | | | | | | | | | | | | | | |
| Source | | Mon <u>Volu</u> | • | gal) | | | aneo Late(; | us gpm) | ! | | | | | | | |
| W-1807 W-1806 | | | | 0 | | | 0.0 0.0 | | | | | | | | | |
| Total: | • | | | <u>0</u> | | | 0.0 | 0 | | | | | | | | |
| 5. Discharge Info | | | | | | | | | | eivii ter S | _ | <u>n</u> | Ž | Volu | <u>me</u> | |
| Arroyo | Las | Posi | <u>tas</u> | | | | | | <u>T</u> | FC- | R003 | 3 | | | _0 | |
| 6. Comments: System sh electronic | | | | /20/0 | 8 du | e to l | high | sum | p ala | rm. | Syste | em s | ecur | e pen | ding | , |
| 7. I certify that the | ne in | form | atio | n in t | his r | epor | t, to | the b | est o | f my | kno | wlec | lge, i | s tru | e and | d correct |
| Operator Signatu | ıre: _ | <u> 1</u> 2 | M | 1 | | | 1 | 1 | | and the second second | Dat | e: 0 8 | <u> 8-04-</u> | 2008 | <u> </u> | |

Self-Monitoring Report LLNL Mini Treatment Unit 02 (MTU02) AREA TFG-N

| 1. Reporting Peri | od: B | Susiness | Mon | ith . | Au | gust | <u>Y</u> | ear <u>2</u> | <u>008</u> | | | | | | |
|--|--------|--------------------|-------------|----------|----------|----------|--------------|--------------|----------------|-------------|---------------|----------|----------|-----------|-----------|
| 2. Dates (in bold | l and | underli | <u>ne</u>) | treat | ed g | roun | d wa | ter w | as d | ischa | argeo | 1 | | | |
| \boldsymbol{c} | | 02 03 17 18 | 04 19 | 05 20 | 06 21 | 07 22 | 08 23 | 09 24 | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 | |
| Total monthl | y tim | e facilit | у оре | erateo | d (ho | ours): | : _(| <u>0</u> | | | | | | | |
| 3. Monthly Comp | olianc | e Data: | | | | | | | | | | | | | |
| Date complia Influent pH: Effluent pH: Effluent Tem | | | | form | ed (n | n/d/y | /): <u>N</u> | ot M | <u>leası</u> | <u>ıred</u> | | | | | |
| 4. Wellfield Data | : | | | | | | | | | | | | | | |
| Source | | Ionthly olume(s | gal) | | tanta | | | | | | | | | | |
| W-1807 W-1806 | | | 0 | | | 0.0 | | | | | | | | | |
| Total: | - | | 0 | | | 0.0 | <u>)</u> | | | | | | | | |
| 5. Discharge Info | rmati | ion: | | | | | | Dag | | • | | | | | |
| Discharge 1 | Locat | tion | | | | | | | eivii ter S | tatio | <u>n</u> | Z | /olur | <u>ne</u> | |
| <u>Arroyo I</u> | Las P | <u>'ositas</u> | | | | | | | FC- | R003 | <u>3</u> | | - | _0 | |
| 6. Comments: System shu electronic e | | | 20/0 | 8 due | e to h | nigh : | sump | o alai | rm. | Syste | em se | ecure | e pen | ding | |
| 7. I certify that th | e info | ormation | ı in t | his re | eport | t, to t | he b | est o | f my | kno | wled | lge, i | s tru | e and | l correct |
| Operator Signatur | re: 🎉 | IMX | // | ll | / | | | • | | Date | e: 0 9 | -03- | 2008 | <u> </u> | |

Self-Monitoring Report LLNL Mini Treatment Unit 02 (MTU02) AREA TFG-N

1. Reporting Period: Business Month September Year 2008 2. Dates (in **bold** and underline) treated ground water was discharged August 30 31 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 Total monthly time facility operated (hours): 0 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm) W-1807 0 0.0 W-1806 0 0.0 Total: 0 0.0 5. Discharge Information: Receiving Discharge Location Water Station Volume Arroyo Las Positas 0 **TFC-R003** 6. Comments: System shut down on 6/20/08 due to high sump alarm. System secure pending repairs. 7. I certify that the information in this report, to the best of my knowledge, is true and correct. _____ Date: **10-02-2008** Operator Signature:

Self-Monitoring Report LLNL Portable Treatment Unit 5 (PTU5) AREA TF406

1. Reporting Period: Business Month July Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) |
|----------------|--|------------------------------|
| W-1309 | 0 | 0.0 |
| W-1310 | 0 | 0.0 |
| GSW-445 | 0 | 0.0 |
| | ###################################### | |
| Total: | 0 | 0.0 |

5. Discharge Information:

| Discharge Location value value value volume | Arroyo Las Positas | TFC-R003 | <u>voidine</u> |
|---|--------------------|---------------|----------------|
| | Discharge Location | Water Station | Volume |

6. Comments:

System shut down on 3/17/08 due to well pump failure in W-1310. Daily operations of system to remain secure until well pump repairs to W-1310 can be facilitated.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 08-04-2008

Self-Monitoring Report LLNL Portable Treatment Unit 5 (PTU5) AREA TF406

1. Reporting Period: Business Month August Year 2008 2. Dates (in **bold** and underline) treated ground water was discharged August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 Total monthly time facility operated (hours): 0 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Volume(gal) Flow Rate(gpm) Source W-1309 0 0.0 W-1310 0.0 0 **GSW-445** 0 0.0 Total: 0 0.0 5. Discharge Information: Receiving **Discharge Location** Water Station Volume Arroyo Las Positas TFC-R003 0 6. Comments: System shut down on 3/17/08 due to well pump failure in W-1310. Daily operations of system to remain secure until well pump repairs to W-1310 can be facilitated. 7. I certify that the information in this report, to the best of my knowledge, is true and correct. Operator Signature: _____ Date: **09-03-2008**

Self-Monitoring Report LLNL Portable Treatment Unit 5 (PTU5) AREA TF406

1. Reporting Period: Business Month September Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 30 31 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) |
|-----------------------------|---------------------|------------------------------|
| W-1309 W-1310 GSW-445 | 0 0 0 | 0.0 0.0 0.0 |
| Total: | <u>0</u> | 0.0 |

5. Discharge Information:

<u>Discharge Location</u>

<u>Mater Station</u>

<u>Volume</u>

<u>Arroyo Las Positas</u>

TFC-R003

0

6. Comments:

System shut down on 3/17/08 due to well pump failure in W-1310. Daily operations of system to remain secure until well pump repairs to W-1310 can be facilitated.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature Date: 10-02-2008

Self-Monitoring Report LLNL GAC Treatment Unit 03 (GTU03) AREA TF406-NW

| 1. Reporting Per | riod: | Busi | ness | Moı | nth | <u>Ju</u> | <u>ly</u> | Year | 200 | 8 | | | | | | |
|---|-------------|--------------------|------------|-------------|----------|----------------|-----------|--------------|----------|----------------|-------------|---------------|--------------|--------------|-----------|-----------|
| 2. Dates (in bol | d an | d <u>un</u> | derli | <u>ne</u>) | trea | ted g | grour | nd wa | ater v | vas c | lisch | arge | d | | | |
| July | 01 16 | 02 17 | | 04 19 | 05 20 | 06 21 | 07 22 | | 09 24 | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 30 | 31 |
| Total month | ly ti | me fa | acilit | у ор | erate | d (h | ours) |): | <u>0</u> | | | | | | | |
| 3. Monthly Com | plia | nce I | Data: | | | | | | | | | | | | | |
| Date compli Influent pH: Effluent pH: Effluent Ter | : | | | | form | ned (| m/d/ | y): <u>N</u> | lot N | <u>Ieas</u> | ured | | | | | |
| 4. Wellfield Data | a: | | | | | | | | | | | | | | | |
| Source | | Mon <u>Volu</u> | - | gal) | | stanta ow R | | us gpm) | | | | | | | | |
| W-1801 | | | | 0 | | | 0.0 | 0 | | | | | | | | |
| Total: | , | | | 0 | | | 0.0 | 0 | | | | | | | | |
| 5. Discharge Info | orma | ition: | : | | | | | | | | | | | | | |
| Discharge | Loc | <u>ation</u> | <u>l</u> | | | | | | | ceivi ter S | ng tatio | <u>n</u> | Ž | Volu | <u>me</u> | |
| Arroyo | Las | <u>Posi</u> | <u>tas</u> | | | | | | <u>T</u> | FC- | <u>R003</u> | <u>3</u> | | | 0 | |
| 6. Comments: System see | cure | penc | ling | well | W-1 | 801 | pum | p rep | airs. | | | | | | | |
| 7. I certify that the | he in | form | ratijoi | n in 1 | his r | epor | t, to | the b | est o | of my | kno | wlec | lge, i | s tru | e and | l correct |
| Operator Signatu | ıre: | M | /// | | | <u>L</u> | | | | - | Dat | e: 0 8 | <u>8-04-</u> | <u> 2008</u> | <u>3</u> | |

Self-Monitoring Report LLNL GAC Treatment Unit 03 (GTU03) AREA TF406-NW

| 1. Reporting Per | riod: | Busi | ness | Moı | nth | <u>A</u> ı | igusi | <u>t</u> Y | ear <u>2</u> | 2008 | | | | | |
|--|-------------|--------------------|------------|----------|-------------|------------|----------------|--------------------------|--------------|----------------|-------------|---------------|----------------|--------------|---------------|
| 2. Dates (in bol | d an | d <u>un</u> | derli | ne) | trea | ted g | groun | ıd wa | ater v | vas c | lisch | arge | d | | |
| August | 01 16 | 02 17 | | 04 19 | | | 07 22 | | 09 24 | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 |
| Total month | ıly ti | me fa | acilit | у ор | erate | d (ho | ours) | : _ | <u>0</u> | | | | | | |
| 3. Monthly Com | plia | nce I | Data: | | | | | | | | | | | | |
| Date compli Influent pH: Effluent pH Effluent Ter | : | | | | form | ed (| m/d/ | y): <u>N</u> | lot M | <u>Ieas</u> | ured | - | | | |
| 4. Wellfield Dat | a: | | | | | | | | | | | | | | |
| Source | | Mon <u>Volu</u> | • | gal) | | | aneo (ate(g | | | | | | | | |
| W-1801 | | | | 0 | | | 0.0 |) | | | | | | | |
| Total: | | | | 0 | | | 0.0 | <u>)</u> | | | | | | | |
| 5. Discharge Inf | orma | ation: | • | | | | | | | | | | | | |
| Discharge | Loc | ation | <u>l</u> | | | | | | | ceivi ter S | ng tatio | <u>n</u> | | Volu | <u>me</u> |
| Arroyo | Las | Posi | <u>tas</u> | | | | | | <u>T</u> | FC- | <u>R00.</u> | 3 | | | _0 |
| 6. Comments: System se | cure | pend | ling | well | W-1 | 801 | pum | p rep | airs. | | | | | | |
| 7. I certify that t | he in | form | atio | n in 1 | his r | epor | t, to | the b | est o | of my | kno | wled | lge, i | s tru | e and correct |
| Operator Signatu | ıre: | M | M | | <u> [l</u> | // | ~ | The second second second | | Mercy. | Dat | e: 0 9 |)- <u>18</u> - | 200 8 | <u>.</u> |

Self-Monitoring Report LLNL GAC Treatment Unit 03 (GTU03) AREA TF406-NW

| 1. Reporting Per | :boi: | Busi | ness | Moı | nth | Se | <u>pten</u> | <u>ıber</u> | . Ye | ear <u>20</u> | <u>008</u> | | | | |
|--|--------------|--------------------|------------|-------------|-------|----------|---------------|-------------------|----------|-----------------|-------------|--------------|-------------|----------|---------------|
| 2. Dates (in bol | d and | d <u>un</u> | derli | <u>ne</u>) | treat | ted g | groun | ıd wa | ıter v | vas d | isch | arge | d | | |
| August September | | | | 04 19 | | 06 21 | | 08 23 | | | | 12 27 | 13 28 | 14 29 | 15 30 |
| Total month | ly tir | me fa | acilit | у ор | erate | d (ho | ours) | : | <u>0</u> | | | | | | |
| 3. Monthly Com | ıpliaı | nce I | Oata: | | | | | | | | | | | | |
| Date compli Influent pH: Effluent pH Effluent Ter | : : | | | | form | ned (1 | m/d/ | y): <u>N</u> | ot M | <u> Ieası</u> | <u>ired</u> | | | | |
| 4. Wellfield Data | a: | | | | | | | | | | | | | | |
| Source | | Mon <u>Volu</u> | • | gal) | | | aneo ate(g | us <u>gpm)</u> | | | | | | | |
| W-1801 | | | | 0 | | | 0.0 |) | | | | | | | |
| Total: | • | | | 0 | | | 0.0 | <u>)</u> | | | | | | | |
| 5. Discharge Info | orma | ition: | : | | | | | | _ | | | | | | |
| Discharge | Loc | ation | <u>l</u> | | | | | | | ceivii ter S | _ | <u>n</u> | · | Volu | <u>me</u> |
| Arroyo | Las | Posi | <u>tas</u> | | | | | | <u>T</u> | 'FC-] | R003 | <u>3</u> | | | 0 |
| 6. Comments: System see | cure | pend | ling | well | W-1 | 801 | pum | p rep | airs. | | | | | | |
| 7. I certify that the | he in | form | akioi | n in t | his r | epor | t, to | the b | est o | f my | kno | wlec | lge, i | s tru | e and correct |
| Operator Signatu | ıre:/ | 1/1 | U. | | | | | | 1 | | Dat | e: <u>10</u> | <u>-02-</u> | 2008 | <u> </u> |
| | | | | | | | | | | | | | | | |

Self-Monitoring Report LLNL Solar Treatment Unit 09 (STU09) AREA TF518-N

1. Reporting Period: Business Month <u>July</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

| July | 01 16 | 02 17 | 03 18 | 04 19 | 05 20 | 06 21 | 07 22 | 08 23 | 09 24 | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 30 | 31 | |
|---|----------|--------------------|------------|----------|----------|----------|----------------|--------------|----------|-----------------|----------|----------|----------|----------|-----------|----------|---|
| Total month | ıly tii | me fa | acilit | у ор | erate | d (h | ours) | : <u> </u> | <u>o</u> | | | | | | | | |
| 3. Monthly Con | npliai | nce I | Data: | | | | | | | | | | | | | | |
| Date compl Influent pH Effluent pH Effluent Te | : | | | | form | ned (| m/d/ | y): <u>N</u> | Not M | <u> 1eas</u> | ured | <u>[</u> | | | | | |
| 4. Wellfield Dat | ta: | | | | | | | | | | | | | | | | |
| Source | | Mon <u>Volu</u> | • | gal) | | | aneo (ate() | us gpm) | <u>!</u> | | | | | | | | |
| W-1410 | | | | 0 | | | 0.0 | 0 | | | | | | | | | |
| Total: | , | | | 0 | | | 0.0 | <u>0</u> | | | | | | | | | |
| 5. Discharge Inf | forma | ition | : | | | | | | Day | منبن | n a | | | | | | |
| Discharge | Loc | atior | <u>1</u> | | | | | | | ceivi iter S | _ | <u>n</u> | . 7 | Volu | <u>me</u> | | |
| Arroyo | Las | Posi | <u>tas</u> | | | | | | <u>T</u> | FC- | R00. | <u>3</u> | | | _0 | | |
| 6. Comments: The treatr the regula | | | • | | | | | | | | nding | g red | uctio | n. D | OE a | nd | |
| 7. I certify that t | | form | litio | | / - | | t, to | | est c | of my | | | lge, i | | | d correc | t |

Self-Monitoring Report LLNL Solar Treatment Unit 09 (STU09) AREA TF518-N

| 1. Reporting Perio | od: Business | Month | Augus | <u>t</u> Ye | ear <u>20</u> | <u>08</u> | | | | | | | |
|--|---|---------------------|-----------------------|---------------|-------------------|-----------|--|--------------|-----------------|------------|---------------------|---|---|
| 2. Dates (in bold | and underlin | <u>ne</u>) trea | ated groun | nd wa | ter wa | ıs dis | scha | arge | d | | | | |
| U | 01 02 03 16 17 18 | | 06 07 21 22 | | | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 | | |
| Total monthly | time facility | operate | ed (hours |): <u>(</u> | <u>)</u> | | | | | | | | |
| 3. Monthly Comp | liance Data: | | | | | | | | | | | | |
| Date compliation Influent pH: Effluent pH: Effluent Temp | | | ned (m/d/ | /y): <u>N</u> | ot Me | easu) | <u>red</u> | | | | | | |
| 4. Wellfield Data: | | | | | | | | | | | | | |
| Source | Monthly Volume(g | | stantanec ow Rate(| | | | | | | | | | |
| W-1410 | | 0 | 0. | 0 | | | | | | | | | |
| | | | | | | | | | | | | | |
| Total: | | <u>0</u> | <u>0.</u> | <u>0</u> | | | | | | | | | |
| Total: 5. Discharge Infor | mation: | <u>0</u> | <u>0.</u> | <u>0</u> | Dana | :: | _ | | | | | | |
| | | <u>0</u> | <u>0.</u> | <u>0</u> | Rece Wate | • | | <u>n</u> | <u> </u> | Volur | <u>ne</u> | | |
| 5. Discharge Infor | | <u>0</u> | <u>0.</u> | <u>0</u> | Wate | • | atio | | Ţ | Volu1 | <u>ne</u> | | |
| 5. Discharge Infor <u>Discharge I</u> <u>Arroyo L</u> 6. Comments: The treatme | <u>Location</u> | shutdov | vn due to | a FY | <u>Wate</u> | C-R | ation .003 | <u>.</u> | | <u>-</u> | 0 | d | |
| 5. Discharge Infor <u>Discharge I</u> <u>Arroyo L</u> 6. Comments: The treatme | ent facility is | shutdov vere not | vn due to | a FY | Wate TF 2008 ion. | er Sta | ontion 003 | redi | uctio | - n. D0 | _ 0 DE an | | • |
| 5. Discharge Information Discharge I Arroyo L 6. Comments: The treatment the regulator | ent facility is ary agencies we information | shutdov vere not | vn due to | a FY nis act | Wate TF 2008 ion. | C-R fund | onside the second secon | redi wlec | uctio lge, i | - n. D0 | 0 DE an | | - |

Self-Monitoring Report LLNL Solar Treatment Unit 09 (STU09) AREA TF518-N

| 1. Reporting Per | 10d: | Busi | ness | Moı | nth | <u>Se</u> | pten | <u>ıber</u> | - Ye | ear <u>2</u> | <u>008</u> | | | | | |
|---|----------------|--------------------|------------|----------|----------|----------------|----------|--------------|----------------|--------------|-------------|--------------|----------|----------|-----------|---------|
| 2. Dates (in bol | d an | d <u>un</u> | derli | ine) | trea | ted g | rour | nd wa | ater v | vas č | lisch | argeo | d | | | |
| August September | 30 01 16 | 31 02 17 | 03 18 | 04 19 | 05 20 | 06 21 | 07 22 | 08 23 | 09 24 | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 30 | |
| Total month | ly tii | me fa | acilit | у ор | erate | d (ho | ours) |): _ | <u>0</u> | | | | | | | |
| 3. Monthly Com | pliaı | nce I | Data: | | | | | | | | | | | | | |
| Date complications Influent pH: Effluent pH: Effluent Ten | | | | | form | ned (1 | m/d/ | y): <u>N</u> | Not M | <u>1eas</u> | <u>ured</u> | | | | | |
| 4. Wellfield Data | a: | | | | | | | | | | | | | | | |
| Source | | Mon <u>Volu</u> | • | gal) | | stanta ow R | | us gpm) | 1 | | | | | | | |
| W-1410 | | | | 0 | | | 0.0 | 0 | | | | | | | | |
| Total: | • | | | <u>0</u> | | | 0.0 | <u>0</u> | | | | | | | | |
| 5. Discharge Info | orma | ition: | • | | | | | | D _o | ceivi | n ~ | | | | | |
| Discharge | Loc | ation | 1 | | | | | | | iter S | _ | <u>n</u> | | Volu | <u>me</u> | |
| Arroyo | Las | Posi | <u>tas</u> | | | | | | <u>T</u> | FC- | R003 | 3 | | | 0 | |
| 6. Comments: This treatmeduction. and resour | Faci | | - | | | | | | | | | | | | _ | ff |
| 7. I certify that the | ne in | form | atio | n in t | | 7 | | | est c | of my | kno | wlec | lge, i | s tru | e and | correct |
| Operator Signatu | ıre: _ | 0 | ou | | l Co | NOS | Jus | <u></u> | | | Dat | e: <u>10</u> |)-09- | 2008 | 1 | |

Self-Monitoring Report LLNL Treatment Facility 518-HDTANK (TF518-HDTANK) AREA TF518-PZ

1. Reporting Period: Business Month July Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): $\underline{0}$

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

| | Monthly | Instantaneous |
|-------------|-------------|----------------|
| Source | Volume(gal) | Flow Rate(gpm) |
| W-1615 | 0 | 0.0 |
| W-518-1913 | 0 | 0.0 |
| W-518-1914 | 0 | 0.0 |
| W-518-1915 | 0 | 0.0 |
| SVB-518-204 | 0 | 0.0 |
| SVB-518-201 | 0 | 0.0 |
| Total: | <u>0</u> | 0.0 |

5. Discharge Information:

| Arroyo Las Positas | TFC-R003 | |
|--------------------|-------------------------|--------|
| Discharge Location | Receiving Water Station | Volume |

6. Comments:

The treatment facility is shutdown due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 07-31-2008

Self-Monitoring Report LLNL Treatment Facility 518-HDTANK (TF518-HDTANK) AREA TF518-PZ

1. Reporting Period: Business Month August Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

| | Monthly | Instantaneous |
|-------------|-------------|----------------|
| Source | Volume(gal) | Flow Rate(gpm) |
| W-1615 | 0 | 0.0 |
| W-518-1913 | 0 | 0.0 |
| W-518-1914 | 0 | 0.0 |
| W-518-1915 | 0 | 0.0 |
| SVB-518-204 | 0 | 0.0 |
| SVB-518-201 | . 0 | 0.0 |
| Total: | <u>0</u> | 0.0 |

5. Discharge Information:

| Discharge Location | Receiving Water Station | Volume |
|--------------------|-------------------------|--------|
| Arroyo Las Positas | TFC-R003 | 0 |

6. Comments:

The treatment facility is shutdown due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 09-02-2008

Self-Monitoring Report LLNL Treatment Facility 518-HDTANK (TF518-HDTANK) AREA TF518-PZ

| | 1. Reporting | Period: | Business Month | September | Year 2008 |
|--|--------------|---------|-----------------------|-----------|-----------|
|--|--------------|---------|-----------------------|-----------|-----------|

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 30 31 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

| | Monthly | Instantaneous |
|-------------|-------------|----------------|
| Source | Volume(gal) | Flow Rate(gpm) |
| W-1615 | 0 | 0.0 |
| W-518-1913 | 0 | 0.0 |
| W-518-1914 | 0 | 0.0 |
| W-518-1915 | 0 | 0.0 |
| SVB-518-204 | 1 0 | 0.0 |
| SVB-518-201 | 0 | 0.0 |
| Total: | <u>0</u> | 0.0 |

5. Discharge Information:

| | Receiving | |
|--------------------|---------------|---------------|
| Discharge Location | Water Station | <u>Volume</u> |
| Arroyo Las Positas | _TFC-R003 | _0 |

6. Comments:

This treatment facility was shut down on 2-27-08 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

| 7. I certify that the in | formation in the | nis/report, to | the best of my | / knowledge, i | s true and correct |
|--|------------------|----------------|----------------|----------------|--------------------|
| 7. I certify that the in Operator Signature: _ | Chu | Cavan | in G | Date: 10-09- | 2008 |

Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 1 (CRD1) AREA TF5475-1

| 1. Reporting Per | riod: | Busi | ness | Mo | nth | _Ju | ly | Year | 200 | <u>8</u> | | | | | | |
|---|-------------|--------------------|----------|----------|------------|----------------|-------|--------------|----------|---------------|-------------|--------------|--------------|--------------|-----------|-----------|
| 2. Dates (in bol | d an | d <u>un</u> | derli | ine) | trea | ted g | rour | nd wa | ater v | vas d | lisch | arge | d | | | |
| July | 01 16 | 02 17 | 03 18 | 04 19 | 05 20 | 06 21 | | 08 23 | 09 24 | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 30 | 31 |
| Total month | ly tii | me fa | acilit | у ор | erate | d (ho | ours) |): _ | 0 | | | | | | | |
| 3. Monthly Com | plia | nce I | Data: | | | | | | | | | | | | | |
| Date compli Influent pH: Effluent pH: Effluent Ter | | | • | | form | ned (1 | m/d/ | y): <u>N</u> | Not N | <u>Ieas</u> i | ured | : | | | | |
| 4. Wellfield Data | a: | | | | | | | | | | | | | | | |
| Source | | Mon <u>Volu</u> | • | gal) | Ins Flo | stanta ow R | | | <u>.</u> | | | | | | | |
| W-1302-2 | | | | 0 | | | 0.0 | 0 | | | | | | | | |
| Total: | • | | | 0 | | | 0.0 | 0 | | | | | | | | |
| 5. Discharge Info | orma | tion | • | | | | | | - | | | | | | | |
| Discharge | Loc | ation | <u>!</u> | | | | | | | ter S | _ | <u>n</u> | Ž | Volu | <u>me</u> | |
| <u>CRD-1</u> i | injec | <u>tion</u> | | | | | | | | V-13 | <u>02-1</u> | | | | _0 | |
| 6. Comments: The treatm the regulat | | | | | | | | | | | ding | ; redi | ıctio | n. De | OE a | nd |
| 7. I certify that the | ne in | form | atio | n in t | his r | epor | t, to | the b | est o | f my | kno | wled | lge, i | s tru | e and | d correct |
| Operator Signatu | ire: _ | <u>He</u> | W | | | // | | | | | Dat | e: <u>08</u> | <u>8-04-</u> | <u> 2008</u> | <u> </u> | |
| | , | | | | | | | | | | | | | | | |

Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 1 (CRD1) AREA TF5475-1

| 1. Reporting Perio | od: Busi | ness Mo | nth _ | Augus | <u>t</u> Y | ear <u>2</u> | 2008 | | | | | | |
|--|---------------------|-----------------|----------|--------------------|--------------|--------------|-------------|-------------|---------------|----------|----------|------------|-------|
| 2. Dates (in bold | and un | derline |) treate | ed grour | nd wa | ater v | vas d | lisch | arge | d | | | |
| \mathcal{C} | 01 02 16 17 | 03 04 18 19 | | 06 07 21 22 | | 09 24 | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 | |
| Total monthly | time fa | cility op | eratec | l (hours) |): _ | <u>o</u> | | | | | | | |
| 3. Monthly Comp | liance D | ata: | | | | | | | | | | | |
| Date compliant Influent pH: Effluent pH: Effluent Temp | | | rforme | ed (m/d/ | y): <u>N</u> | lot N | <u>Ieas</u> | ured | : | | | | |
| 4. Wellfield Data: | | | | | | | | | | | | | |
| Source | Mont <u>Volu</u> | thly me(gal) | | antaneo w Rate(| | | | | | | | | |
| W-1302-2 | | 0 | | 0.0 | 0 | | | | | | | | |
| Total: | | <u>0</u> | | 0.0 | <u>0</u> | | | | | | | | |
| 5. Discharge Infor | mation: | | | | | Dag | eivii | 200 | | | | | |
| Discharge L | ocation | i | | | | | | tatio | <u>n</u> | Ž | Volu | <u>ne</u> | |
| CRD-1 in | jection | | | | | | V-13 | <u>02-1</u> | | | - | _0 | |
| 6. Comments: The treatme the regulator | | | | | | | 8 fun | ding | ; redi | uctio | n. D0 | OE and | |
| 7. I certify that the | inform | ation in | this re | port, to | the b | est o | f my | kno | wlec | lge, i | s tru | e and corr | rect. |
| Operator Signature | e:///// | U/ / | M | 1 | | MANAGEMENT | | Dat | e: 0 9 | -02- | 2008 | ; | |

Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 1 (CRD1) AREA TF5475-1

| 1. Reporting Per | riod: | Busi | ness | Mor | nth | _Se | pten | <u>ıber</u> | . Ye | ear <u>2</u> | <u>800</u> | | | | |
|---|----------------|--------------------|----------|-------------|----------|----------------|---------|--------------|---------------|-----------------|--------------------|--------------|----------|-------------|----------------|
| 2. Dates (in bol | d an | d <u>un</u> | derli | <u>ne</u>) | trea | ted g | roun | d wa | iter v | vas c | lisch | argeo | d | | |
| August September | 30 01 16 | 02 | 03 18 | 04 19 | 05 20 | 06 21 | | | 09 24 | | 11 26 | 12 27 | 13 28 | 14 29 | 15 30 |
| Total month | ly ti | me fa | acilit | у ор | erate | d (ho | ours) | : | <u>0</u> | | | | | | |
| 3. Monthly Com | ıpliaı | nce I | Data: | | | | | | | | | | | | |
| Date compli Influent pH: Effluent pH: Effluent Ter | : | | | | form | ned (1 | m/d/ː | y): <u>N</u> | lot N | <u>Ieas</u> | <u>ured</u> | | | | |
| 4. Wellfield Data | a: | | | | | | | | | | | | | | |
| Source | | Mon <u>Volu</u> | - | gal) | | stanta ow R | | | | | | | | | |
| W-1302-2 | ; | | | 0 | | | 0.0 |) | | | | | | | |
| Total: | • | | | 0 | | | 0.0 | <u>)</u> | | | | | | | |
| 5. Discharge Info | orma | ition: | : | | | | | | D | . | | | | | |
| Discharge | Loc | ation | <u>l</u> | | | | | | | ceivii ter S | ng <u>tatio</u> | <u>n</u> | Š | Volu | <u>me</u> |
| CRD-1 | injec | <u>ction</u> | | | | | | | | V-13 | <u>02-1</u> | | | | 0 |
| 6. Comments: This treatr reduction, and resour | faci | | • | | | | | | | | | | | | _ |
| 7. I certify that the | he in | form | ation | ı in t | his r | epor | t, to 1 | the b | est o | f my | kno | wled | lge, i | s tru | e and correct. |
| Operator Signatu | ıre:/ <u>-</u> | | L | 1 | <u>L</u> | _ | | | 2225.000 (E.) | | Dat | e: <u>10</u> | -30- | <u>2008</u> | <u>.</u> |

Self-Monitoring Report LLNL GAC Treatment Unit 09 (GTU09) AREA TF5475-2

1. Reporting Period: Business Month _July Year 2008 2. Dates (in **bold** and underline) treated ground water was discharged July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Total monthly time facility operated (hours): 0 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm) W-1108 0 0.0 W-1415 0 0.0Total: 0 0.0 5. Discharge Information: Receiving Discharge Location Water Station Volume **Arroyo Las Positas** TFC-R003 <u>0</u> 6. Comments: The treatment facility is shutdown due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action. 7. I certify that the information in this report, to the best of my knowledge, is true and correct. Operator Signature: _ Date: **08-04-2008**

Self-Monitoring Report LLNL GAC Treatment Unit 09 (GTU09) AREA TF5475-2

| 1. | Reporting Per | iod: | Busi | ness | Moı | nth | _ <u>A</u> ı | ıgus1 | <u>t</u> Y | ear <u>2</u> | 2008 | | | | | | |
|----|---|----------|--------------------|------------|-------------|----------|--------------|-------------------|--------------|--------------|-------------|----------|---------------|----------|----------|-----------|---------|
| 2. | Dates (in bole | d an | d <u>un</u> | derli | <u>ne</u>) | trea | ted g | grour | nd wa | ater v | vas d | lisch | arge | d | | | |
| | August | 01 16 | 02 17 | 03 18 | 04 19 | 05 20 | 06 21 | 07 22 | 08 23 | 09 24 | 10 25 | 11 26 | 12 27 | 13 28 | 14 29 | 15 | |
| | Total month | ly ti | me fa | acilit | у ор | erate | d (h | ours) | : _ | <u>o</u> | | | | | | | |
| 3. | Monthly Com | plia | nce D |)ata: | | | | | | | | | | | | | |
| | Date compli Influent pH: Effluent pH: Effluent Ter | nper | | | | form | ned (| m/d/ _] | y): <u>N</u> | lot M | 1eas | ured | : | | | | |
| 4. | Wellfield Data | a: | | | | | | | | | | | | | | | |
| | Source | | Mon <u>Volu</u> | • | gal) | | | aneo Late(g | us gpm) | | | | | | | | |
| | W-1108 W-1415 | | | | 0 | | | 0.0 0.0 | | | | | | | | | |
| | Total: | • | | | 0 | | | 0.0 | <u>D</u> | | | | | | | | |
| 5. | Discharge Info | orma | ıtion: | | | | | | | Red | eivi | ng | | | | | |
| | <u>Discharge</u> | Loc | ation | <u> </u> | | | | | | | ter S | _ | <u>n</u> | Ţ | Volu | <u>me</u> | |
| | Arroyo | Las | Posit | <u>tas</u> | | | | | | <u>T</u> | FC- | R003 | <u>3</u> | | | _0 | |
| 6. | Comments: The treatm the regulat | | | • | | | | | | | | ıding | ; redi | ıctio | n. De | OE an | d |
| 7. | I certify that the | ne in | form | ation | n in t | this r | epor | t, to | the b | est o | f my | kno | wlec | lge, i | is tru | e and | correct |
| Oį | perator Signatu | ıre: | <u>V/4</u> | N/ | 6 | | _ | _ | | | | Dat | e: 0 9 | -18- | 2008 | <u> </u> | |

Self-Monitoring Report LLNL GAC Treatment Unit 09 (GTU09) AREA TF5475-2

1. Reporting Period: Business Month <u>September</u> Year <u>2008</u> 2. Dates (in **bold** and underline) treated ground water was discharged August 30 31 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 Total monthly time facility operated (hours): 0 3. Monthly Compliance Data: Date compliance sampling performed (m/d/y): Not Measured Influent pH: Effluent pH: Effluent Temperature (°C): 4. Wellfield Data: Monthly Instantaneous Source Volume(gal) Flow Rate(gpm) W-1108 0 0.0 W-1415 0 0.0 Total: 0.00 5. Discharge Information: Receiving Discharge Location Water Station Volume **Arroyo Las Positas TFC-R003** _0 6. Comments: This treatment facility was shut down on 2/27/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources. 7. I certify that the information in this report, to the best of my knowledge, is true and correct. _____ Date: 10-30-2008 Operator Signature:

Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 2 (CRD2) AREA TF5475-3

1. Reporting Period: Business Month July Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

| Source | Monthly Volume(gal) | Instantaneous Flow Rate(gpm) |
|--------|---------------------|------------------------------|
| W-1608 | 0 | 0.0 |
| W-1605 | 0 | 0.0 |
| W-1604 | 0 | 0.0 |
| W-1609 | 0 | 0.0 |
| Total: | <u>0</u> | 0.0 |

5. Discharge Information:

| Discharge Location | Receiving Water Station | Volume |
|--------------------|-------------------------|--------|
| CRD-2 injection | W-1610 | 0 |

6. Comments:

The treatment facility is shutdown due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 08-04-2008

Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 2 (CRD2) AREA TF5475-3

1. Reporting Period: Business Month <u>August</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

| Source | Monthly <u>Volume(gal)</u> | Instantaneous Flow Rate(gpm) | | |
|--------|-------------------------------|------------------------------|--|--|
| W-1608 | 0 | 0.0 | | |
| W-1605 | 0 | 0.0 | | |
| W-1604 | 0 | 0.0 | | |
| W-1609 | 0 | 0.0 | | |
| Total: | <u>0</u> | 0.0 | | |

5. Discharge Information:

| <u>Discharge Location</u> | Water Station | <u>Volume</u> |
|---------------------------|---------------|---------------|
| CRD-2 injection | _W-1610 | _0 |

Receiving

6. Comments:

The treatment facility is shutdown due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 09-02-2008

Self-Monitoring Report LLNL Catalytic Reductive Dehalogenation 2 (CRD2) AREA TF5475-3

1. Reporting Period: Business Month September Year 2008

2. Dates (in **bold** and <u>underline</u>) treated ground water was discharged

August 30 31 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): _0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

| Source | Monthly <u>Volume(gal)</u> | Instantaneous Flow Rate(gpm) | | |
|--------|----------------------------|------------------------------|--|--|
| W-1608 | 0 | 0.0 | | |
| W-1605 | 0 | 0.0 | | |
| W-1604 | 0 | 0.0 | | |
| W-1609 | 0 | 0.0 | | |
| Total: | 0 | 0.0 | | |

5. Discharge Information:

| Discharge Location | W-1610 | 0 |
|--------------------|-------------------------|---|
| Discharge Land's | Receiving Water Station | |

6. Comments:

This treatment facility was shut down on 8/31/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 10-30-2008

Self-Monitoring Report LLNL Vapor Extraction System 08 (VES08) AREA VTF406-HS

- 1. Reporting Period: Business Month __July Year 2008
- 2. Dates (in **bold** and underline) treatment facility operated

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

| Source | Monthly Volume(cu. ft) | Instantaneous Flow Rate(scfm) | P(in. Hg) | _ | Hours of Op. | |
|-------------|------------------------|-------------------------------|-----------|---|-----------------|--|
| W-217 | 0 | 0.0 | 0 | 0 | 0 | |
| W-514-2007A | 0 | 0.0 | 0 | 0 | 0 | |
| W-514-2007F | 0 | 0.0 | 0 | 0 | 0 | |
| Total: | <u>0</u> | 0.0 | | | | |

4. Comments:

"A data review conducted in late June indicates that recent flow totals for this facility are suspect. The facility was shutdown on 6/26 and will remain down until issues with the flow totals are resolved".

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 08-04-2008

Self-Monitoring Report LLNL Vapor Extraction System 08 (VES08) AREA VTF406-HS

1. Reporting Period: Business Month <u>August</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

| | Monthly | Instantaneous | | F | Hours | |
|-------------|----------------|-------------------|-----------|----------------|-------|--|
| Source | Volume(cu. ft) |) Flow Rate(scfm) | P(in. Hg) | <u>T(°F)</u> o | f Op. | |
| W-217 | 0 | 0.0 | 0 | 0 | 0 | |
| W-514-2007A | 0 | 0.0 | 0 | 0 | 0 | |
| W-514-2007B | 0 | 0.0 | 0 | 0 | 0 | |
| | | | | | | |
| Total: | <u>0</u> | <u>0.0</u> | | | | |

4. Comments:

"A data review conducted in late June indicates that recent flow totals for this facility are suspect. The facility was shutdown on 6/26 and will remain down until issues with the flow totals are resolved". Did not operate in the month of August 2008.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 09-02-2008

Self-Monitoring Report LLNL Vapor Extraction System 08 (VES08) AREA VTF406-HS

1. Reporting Period: Business Month September Year 2008

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

August 30 31 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

| | Monthly | Instantaneous | | \mathbf{H} | Iours | |
|-------------|----------------|-----------------|-----------|------------------|-------|--|
| Source | Volume(cu. ft) | Flow Rate(scfm) | P(in. Hg) | $T(^{\circ}F)$ o | f Op. | |
| W-217 | 0 | 0.0 | 0 | 0 | 0 | |
| W-514-2007A | 0 | 0.0 | . 0 | 0 | 0 | |
| W-514-2007I | 0 | 0.0 | 0 | 0 | 0 | |
| Total: | <u>0</u> | 0.0 | | | | |

4. Comments:

"A data review conducted in late June indicates that recent flow totals for this facility are suspect. The facility was shutdown on 6/26 and will remain down until issues with the flow totals are resolved". Did not operate in the month of Sept. 2008.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 10-01-2008

Self-Monitoring Report LLNL Vapor Extraction System 14 (VES14) AREA VTF511

1. Reporting Period: Business Month July Year 2008

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

July <u>01 02 03 04 05 06 07 08</u> 09 10 11 12 13 <u>14 15</u> <u>16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31</u>

3. Wellfield Data:

| | Monthly | Instantaneous | | | Hours |
|---------|----------------|-----------------|-----------|------------------------|--------|
| Source | Volume(cu. ft) | Flow Rate(scfm) | P(in. Hg) | $\underline{T(^{o}F)}$ | of Op. |
| W-274 | 0 | 0.0 | 0 | 0 | 0 |
| W-2208A | 0 | 0.0 | 0 | 0 | 0 |
| W-2207A | 0 | 0.0 | 0 | 0 | 0 |
| W-2207B | 344,412 | 9.9 | -23.14 | 55 | 562 |
| W-1517 | 0 | 0.0 | 0 | 0 | 0 |
| W-2208B | 369,574 | 10.4 | -23.14 | 55 | 562 |
| W-2204 | 0 | 0.0 | 0 | 0 | 0 |
| W-2206 | 0 | 0.0 | 0 | 0 | 0 |
| W-2205 | 0 | 0.0 | 0 | 0 | 0 |
| Total: | 713,986 | 20.4 | | | |

4. Comments:

Operations suspended on 7-8-08 due to elevated ambient temps. Facility restarted on 7-14-08. Suspended operations on 7-15-08 to replace two spent GAC's. Restarted facility on 7-16-08

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 08-04-2008

Self-Monitoring Report LLNL Vapor Extraction System 14 (VES14) AREA VTF511

- 1. Reporting Period: Business Month <u>August</u> Year <u>2008</u>
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

3. Wellfield Data:

| | Monthly I | nstantaneous | | | Hours | |
|---------|---|-----------------|-----------|--------------------------|--------|---|
| Source | Volume(cu. ft) | Flow Rate(scfm) | P(in. Hg) | $\underline{T({}^o\!F)}$ | of Op. | |
| W-274 | 0 | 0.0 | 0 | 0 | 0 | |
| W-2208A | 0 | 0.0 | 0 | 0 | 0 | |
| W-2207A | 0 | 0.0 | 0 | 0 | 0 | |
| W-2207B | 222,057 | 10.0 | -22.92 | 67 | 361 | |
| W-1517 | 0 | 0.0 | 0 | 0 | 0 | |
| W-2208B | 234,180 | 10.3 | -22.92 | 67 | 361 | |
| W-2204 | 0 | 0.0 | 0 | 0 | 0 | |
| W-2206 | 0 | 0.0 | 0 | 0 | 0 | |
| W-2205 | 0 | 0.0 | 0 | 0 | 0 | |
| | *************************************** | | | | | _ |
| Total: | <u>456,237</u> | <u>20.3</u> | | | | |

4. Comments:

Facility was discovered non-operational on Mon. 8/18/08 with no available electronic data, no indication of date or time of failure. SMR data is based on log book data collected on Friday 8/15/08. Operational days and totals may need to be revised once the electronic data has been evaluated. Facility is currently non-operational.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Desparator Date: 09-09-2003

Self-Monitoring Report LLNL Vapor Extraction System 14 (VES14) AREA VTF511

1. Reporting Period: Business Month <u>September</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

August 30 31 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

| | Monthly Inst | tantaneous | | H | Iours |
|---------|--------------------|--------------|-----------|----------------|-------|
| Source | Volume(cu. ft) Flo | w Rate(scfm) | P(in. Hg) | <u>T(°F)</u> o | f Op. |
| W-274 | 0 | 0.0 | 0 | 0 | 0 |
| W-2208A | 0 | 0.0 | 0 | 0 | 0 |
| W-2207A | 0 | 0.0 | 0 | 0 | 0 |
| W-2207B | 0 | 0.0 | 0 | 0 | 0 |
| W-1517 | 0 | 0.0 | 0 | 0 | 0 |
| W-2208B | 0 | 0.0 | 0 | 0 | 0 |
| W-2204 | 0 | 0.0 | 0 | 0 | 0 |
| W-2206 | 0 | 0.0 | 0 | 0 | 0 |
| W-2205 | 0 | 0.0 | 0 | 0 | 0 |
| Total: | <u>0</u> | 0.0 | | | |

4. Comments:

Facility was discovered non-operational on Mon. 8/18/08 with no available electronic data, no indication of date or time of failure. SMR data for August is based on log book data collected on Friday 8/15/08. Operational days and totals may need to be revised once the electronic data has been evaluated. Facility is currently non-operational. Facility did not operate in Sept.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature Date: 10-01-2008

Self-Monitoring Report LLNL Vapor Extraction System 19 (VES19) AREA VTF518-PZ

1. Reporting Period: Business Month July Week: 1 Year 2008

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

| | Weekly | Instantaneous | | H | Hours |
|-------------|----------------|-------------------|-----------|----------------|--------|
| Source | Volume(cu. ft) | Flow Rate(scfm) | P(in. Hg) | <u>Γ(°F)</u> ο | of Op. |
| W-1615 | 0 | 0.0 | 0 | 0 | 0 |
| W-518-1913 | 0 | 0.0 | 0 | 0 | 0 |
| W-518-1914 | 0 | 0.0 | 0 | 0 | 0 |
| W-518-1915 | 0 | 0.0 | 0 | 0 | 0 |
| SVB-518-204 | 0 | 0.0 | 0 | 0 | 0 |
| SVB-518-201 | 0 | 0.0 | 0 | 0 | 0 |
| | - | | | | |
| Total: | <u>0</u> | $\underline{0.0}$ | | | |

4. Comments:

The treatment facility is shutdown due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 08-04-2008

Self-Monitoring Report LLNL Vapor Extraction System 19 (VES19) AREA VTF518-PZ

1. Reporting Period: Business Month <u>August Week: 1</u> Year <u>2008</u>

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

| | Weekly Ins | stantaneous | | H | Iours |
|-------------|--------------------|---------------|-----------|----------------|-------|
| Source | Volume(cu. ft) Flo | ow Rate(scfm) | P(in. Hg) | <u>Γ(°F)</u> ο | f Op. |
| W-1615 | 0 | 0.0 | 0 | 0 | 0 |
| W-518-1913 | 0 | 0.0 | 0 | 0 | 0 |
| W-518-1914 | 0 | 0.0 | 0 | 0 | 0 |
| W-518-1915 | 0 | 0.0 | 0 | 0 | 0 |
| SVB-518-204 | 0 | 0.0 | 0 | 0 | 0 |
| SVB-518-201 | . 0 | 0.0 | 0 | 0 | 0 |
| Total: | <u>0</u> | 0.0 | | | |

4. Comments:

The treatment facility is shutdown due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 09-02-2008

Self-Monitoring Report LLNL Vapor Extraction System 19 (VES19) AREA VTF518-PZ

- 1. Reporting Period: Business Month September Year 2008
- 2. Dates (in **bold** and <u>underline</u>) treatment facility operated

August 30 31 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

| | Monthly | Instantaneous | | H | Iours |
|-------------|----------------|-----------------|-----------|----------------|-------|
| Source | Volume(cu. ft) | Flow Rate(scfm) | P(in. Hg) | <u>Γ(°F)</u> ο | f Op. |
| W-1615 | 0 | 0.0 | 0 | 0 | 0 |
| W-518-1913 | 0 | 0.0 | 0 | 0 | 0 |
| W-518-1914 | 0 | 0.0 | 0 | 0 | 0 |
| W-518-1915 | 0 | 0.0 | 0 | 0 | 0 |
| SVB-518-204 | . 0 | 0.0 | 0 | 0 | 0 |
| SVB-518-201 | 0 | 0.0 | 0 | 0 | 0 |
| Total: | <u>0</u> | 0.0 | | | |

4. Comments:

This treatment facility was shut down on 2/27/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 10-30-2008

Self-Monitoring Report LLNL Vapor Extraction System 01 (VES01) AREA VTF5475

1. Reporting Period: Business Month __July Year 2008

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

| | Monthly | Instantaneous | | F | Hours |
|-------------|----------------|-----------------|-----------|-----------------------|--------|
| Source | Volume(cu. ft) | Flow Rate(scfm) | P(in. Hg) | <u>Γ(°F)</u> <u>c</u> | of Op. |
| W-ETS-507 | 0 | 0.0 | 0 | 0 | 0 |
| W-1605 | 0 | 0.0 | 0 | 0 | 0 |
| W-1608 | 0 | 0.0 | 0 | 0 | 0 |
| W-2303 | 0 | 0.0 | 0 | 0 | 0 |
| W-2212 | 0 | 0.0 | 0 | 0 | 0 |
| W-2211 | 0 | 0.0 | 0 | 0 | 0 |
| W-2302 | 0 | 0.0 | 0. | 0 | 0 |
| SVI-ETS-504 | 1 0 | 0.0 | 0 | 0 | 0 |
| Total: | <u>0</u> | 0.0 | | | · |

4. Discharge Information:

| Discharge Location | Receiving Water Station | Volume |
|------------------------------|-------------------------|--------|
| VTF5475 Vapor Injection Well | SVI-ETS-505 | 0 |

5. Comments:

The treatment facility is shutdown due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 07-31-200

Self-Monitoring Report LLNL Vapor Extraction System 01 (VES01) AREA VTF5475

1. Reporting Period: Business Month August Year 2008

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

| | Monthly | Instantaneous | | | Hours |
|-------------|----------------|-----------------|---|---|--------|
| Source | Volume(cu. ft) | Flow Rate(scfm) | P(in. Hg) | T(°F) | of Op. |
| W-ETS-507 | 0 | 0.0 | 0 | 0 | 0 |
| W-1605 | 0 | 0.0 | 0 | 0 | 0 |
| W-1608 | 0 | 0.0 | 0 | 0 | 0 |
| W-2303 | 0 | 0.0 | 0 | 0 | 0 |
| W-2212 | 0 | 0.0 | 0 | 0 | 0 |
| W-2211 | 0 | 0.0 | , 0 | 0 | 0 |
| W-2302 | 0 | 0.0 | 0 | 0 | 0 |
| SVI-ETS-504 | 0 | 0.0 | 0 | 0 | 0 |
| Total: | <u>0</u> | 0.0 | MINING MARK AND A STATE OF THE | *************************************** | |

4. Discharge Information:

| | Receiving | |
|------------------------------|---------------|---------------|
| Discharge Location | Water Station | <u>Volume</u> |
| VTF5475 Vapor Injection Well | _SVI-ETS-505 | _0 |

5. Comments:

The treatment facility is shutdown due to a FY 2008 funding reduction. DOE and the regulatory agencies were notified of this action.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 09-02-2008

Self-Monitoring Report LLNL Vapor Extraction System 01 (VES01) AREA VTF5475

1. Reporting Period: Business Month September Year 2008

2. Dates (in **bold** and <u>underline</u>) treatment facility operated

August 30 31 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

| | Monthly | Hours | | | | | |
|-------------|----------------|-----------------|------------------------|---|---|--|--|
| Source | Volume(cu. ft) | Flow Rate(scfm) | P(in. Hg) T(°F) of Op. | | | | |
| W-ETS-507 | 0 | 0.0 | 0 | 0 | 0 | | |
| W-1605 | 0 | 0.0 | 0 | 0 | 0 | | |
| W-1608 | 0 | 0.0 | 0 | 0 | 0 | | |
| W-2303 | 0 | 0.0 | 0 | 0 | 0 | | |
| W-2212 | 0 | 0.0 | 0 | 0 | 0 | | |
| W-2211 | 0 | 0.0 | 0 | 0 | 0 | | |
| W-2302 | 0 | 0.0 | 0 | 0 | 0 | | |
| SVI-ETS-504 | 1 0 | 0.0 | 0 | 0 | 0 | | |
| Total: | <u>0</u> | 0.0 | | | | | |

4. Discharge Information:

| Discharge Location | Receiving Water Station | Volume | |
|------------------------------|-------------------------|--------|--|
| VTF5475 Vapor Injection Well | SVI-ETS-505 | 0 | |

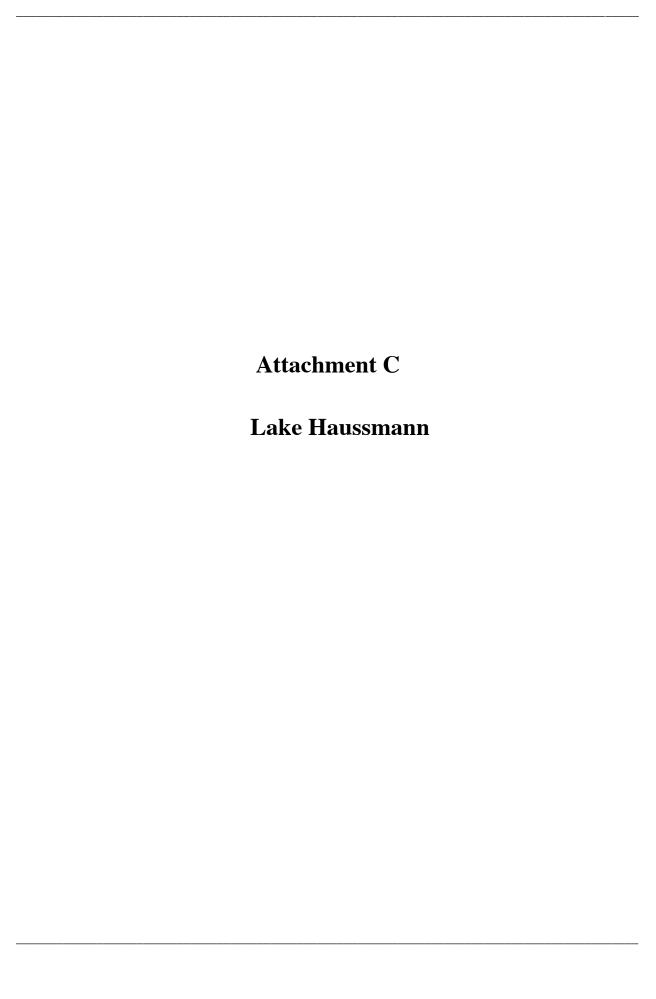
5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

6. I certify that the information in this deport, to the best of my knowledge, is true and correct.

Operator Signature:

Date: 10-09-2008



Attachment C

Lake Haussmann Third Quarter 2008 Monitoring Program Summary

This attachment summarizes the third quarter 2008 LLNL Environmental Protection Department discharge data for Lake Haussmann. Lake Haussmann is an artificial water body that has a 37 acre-ft capacity. It is located in the central portion of the Livermore Site (Fig. C-1) and receives storm water runoff and treated ground water discharges.

Samples are collected from water discharged from Lake Haussmann and analyzed as outlined in Jackson (2002). The discharge samples are used to determine compliance with discharge limits in the *Record of Decision* (DOE, 1992), and the subsequent *Explanation of Significant Differences for Metals Discharge Limits* (Berg et al., 1997).

Dry season (June, July, August, September) discharges are sampled at each manual release or monthly during periods of continual release. Wet season (October through May) discharge samples are collected at the first release of the wet season and one other discharge in conjunction with a storm water monitoring event. Analytic results of discharge samples collected at location CDBX are compared with the LLNL Arroyo Las Positas outfall sample results collected at location WPDC (Fig. C-1). The results for samples collected at locations CDBX and WPDC are presented in Table C-1. All PCBs were below detection limits. No metals exceed discharge limits. The pH values at both locations exceeded the desired range of 6.5 to 8.5. The pH has averaged 8.6 since 1998 at the CDBX sampling location and is typically elevated during summer due to increased photosynthesis. Aquatic bioassay tests showed no toxicity.

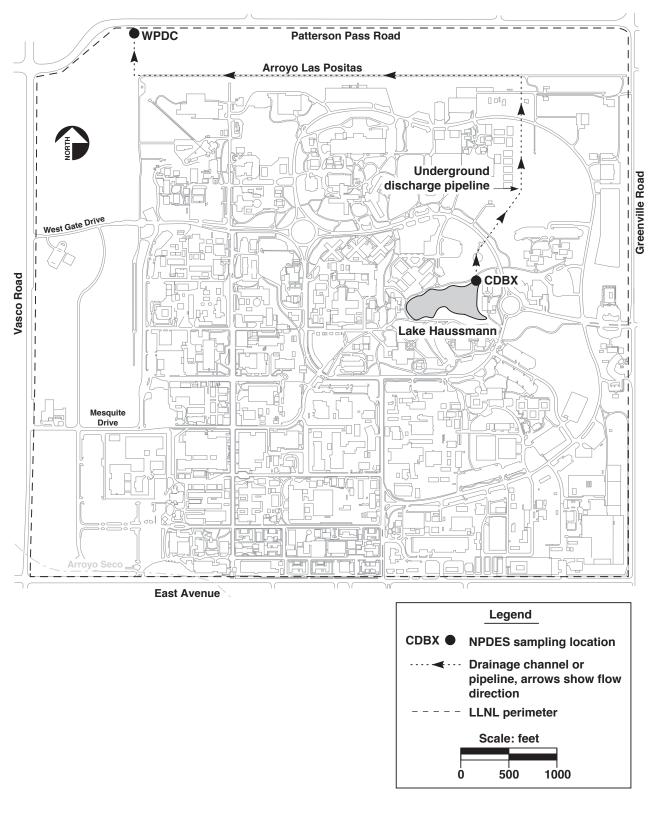
Discharge from Lake Haussmann remained continuous during the third quarter. The Lake Haussmann upper weir gate was maintained at the lowered position during the entire third quarter so that releases occurred continuously to minimize changes in surface water level and allow for a more natural ecosystem.

References

- U.S. Department of Energy, *Record of Decision for the Lawrence Livermore National Laboratory*, *Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA, UCRL-AR-109105, (1992).
- Berg, L.L., E.N. Folsom, M.D. Dresen, R.W. Bainer, and A.L. Lamarre, Eds., *Explanation of Significant Differences for Metals Discharge Limits at the Lawrence Livermore National Laboratory, Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA, UCRL-AR-125927 (1997).
- Jackson, C.S., Drainage Retention Basin Monitoring Plan Change, Letter to Ms. Naomi Feger, San Francisco Bay RWQCB, Lawrence Livermore National Laboratory, Livermore, CA, WGMG02:175:CSJ:RW:kh, (December 6, 2002).

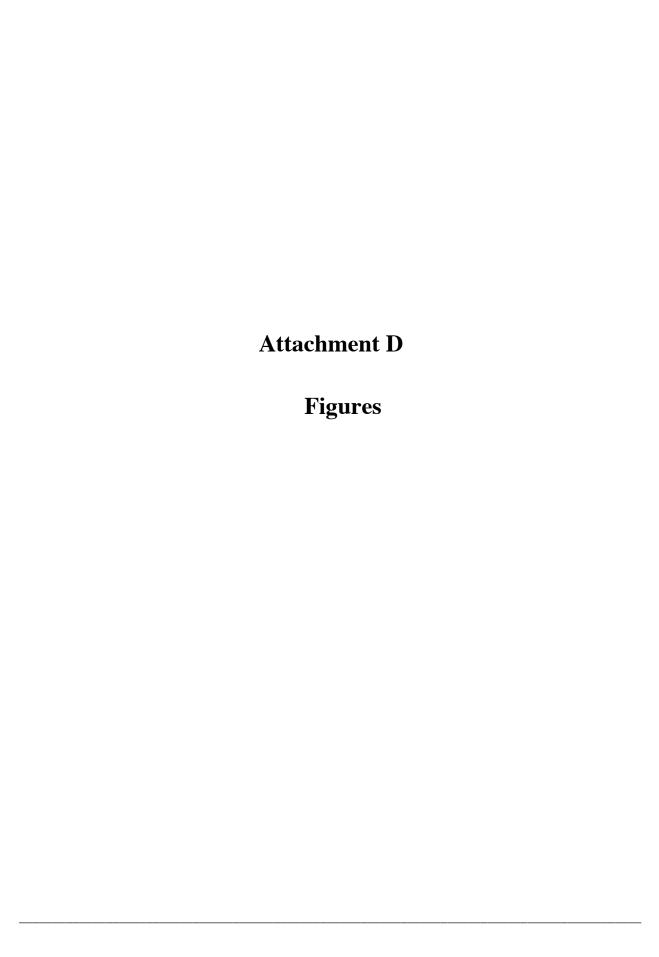
| Table C-1 LLNL Lake Haussmann release monitoring data for points CDBX and WPDC, July through September 2008. | | | | | | | | | |
|--|---------|-----------|--------------|--------------|--------------|--------------|--------------|--------------|---|
| | | | CDBX 7/23 | CDBX 8/19 | CDBX 9/24 | WPDC 7/23 | WPDC 8/19 | WPDC 9/24 | Discharge Limits 1-Apr through 30-Nov |
| Physical | | | | | | | | | |
| рН | Units | EPA-150.1 | 9.48 | 9.5 | 9.19 | 8.4 | 8.49 | 8.57 | not <6.5 nor >8.5 |
| Total suspended solids (TSS) | mg/L | EPA-160.2 | 1.2 | 6.3 | 8. | 23 | 32 | 46 | na |
| Polychlorinated biphenyls | | | а | а | а | b | b | b | na |
| PCB 1016 | ug/L | E8082A | < 0.5 | < 0.5 | < 0.5 | b | b | b | na |
| PCB 1221 | ug/L | E8082A | < 0.5 | < 0.5 | < 0.5 | b | b | b | na |
| PCB 1232 | ug/L | E8082A | < 0.5 | < 0.5 | < 0.5 | b | b | b | na |
| PCB 1242 | ug/L | E8082A | < 0.5 | < 0.5 | < 0.5 | b | b | b | na |
| PCB 1248 | ug/L | E8082A | < 0.5 | < 0.5 | < 0.5 | b | b | b | na |
| PCB 1254 | ug/L | E8082A | < 0.5 | < 0.5 | < 0.5 | b | b | b | na |
| PCB 1260 | ug/L | E8082A | < 0.5 | < 0.5 | < 0.5 | b | b | b | na |
| Metals - Total | | | | | | | | | |
| Aluminum | mg/L | EPA-200.7 | < 0.05 | < 0.05 | < 0.05 | 0.37 | 0.22 | 0.72 | na |
| Antimony | mg/L | EPA-200.8 | <0.002 | < 0.002 | < 0.002 | <0.002 | < 0.002 | < 0.002 | 0.006 |
| Arsenic | mg/L | EPA-200.8 | 0.002 | < 0.002 | < 0.002 | 0.0021 | < 0.002 | <0.002 | 0.05 |
| Barium | mg/L | EPA-200.7 | 0.091 | 0.098 | 0.12 | 0.11 | 0.11 | 0.12 | na |
| Beryllium | mg/L | EPA-210.2 | <0.0002 | <0.0008 | <0.0008 | <0.0002 | <0.0008 | <0.0008 | 0.004 |
| Boron | mg/L | EPA-200.7 | 2.3 | 2.3 | | 1.7 | 1.1 | 1.2 | na |
| Cadmium | mg/L | EPA-200.8 | <0.001 | <0.001 | < 0.001 | <0.001 | < 0.001 | < 0.001 | 0.005 |
| Chromium | mg/L | EPA-200.8 | < 0.003 | < 0.003 | < 0.003 | 0.01 | 0.012 | 0.015 | 0.05 |
| Cobalt | mg/L | EPA-200.7 | < 0.05 | < 0.05 | < 0.05 | <0.05 | < 0.05 | < 0.05 | na |
| Copper | mg/L | EPA-200.8 | <0.002 | < 0.002 | < 0.002 | 0.002 | < 0.002 | 0.0023 | 1.3 |
| Hexavalent Chromium | mg/L | EPA-7196 | 0.0023 | 0.00099 | 0.0017 | 0.0071 | 0.011 | 0.011 | na |
| Iron | mg/L | EPA-200.7 | < 0.05 | < 0.05 | < 0.05 | 0.52 | 0.28 | 0.88 | na |
| Lead | mg/L | EPA-200.8 | <0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | <0.001 | 0.015 |
| Manganese | mg/L | EPA-200.8 | 0.0013 | 0.0033 | 0.0026 | 0.013 | 0.007 | 0.015 | 0.5 |
| Mercury | mg/L | EPA-245.1 | < 0.0002 | < 0.0002 | < 0.0002 | <0.0002 | < 0.0002 | <0.0002 | 0.002 |
| Molybdenum | mg/L | EPA-200.8 | 0.0034 | 0.0032 | 0.0035 | 0.0031 | 0.0026 | 0.0025 | 0.05 |
| Nickel | mg/L | EPA-200.8 | <0.002 | | <0.002 | 0.0027 | 0.0022 | 0.0037 | 0.1 |
| Selenium | mg/L | EPA-200.8 | <0.002 | <0.002 | 0.002 | <0.002 | < 0.002 | <0.002 | 0.05 |
| Silver | mg/L | EPA-200.8 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.1 |
| Thallium | mg/L | EPA-200.8 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.002 |
| Vanadium | mg/L | EPA-200.7 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.011 | na |
| Zinc | mg/L | EPA-200.7 | <0.05 | <0.05 | | <0.05 | <0.05 | <0.05 | na |
| Toxicity | Ĭ | | | | | | | | |
| Aq. Bioassay, Survival | Percent | Title 22 | 100. | 90. | 100. | 100. | 90. | 100 | na |

a) All analysis results for these analytes are below reporting limits.b) Sampling for these analytes not required at this location.



ERD-S3R-08-0041

Figure C-1. Location of Lake Haussmann showing discharge sampling locations.



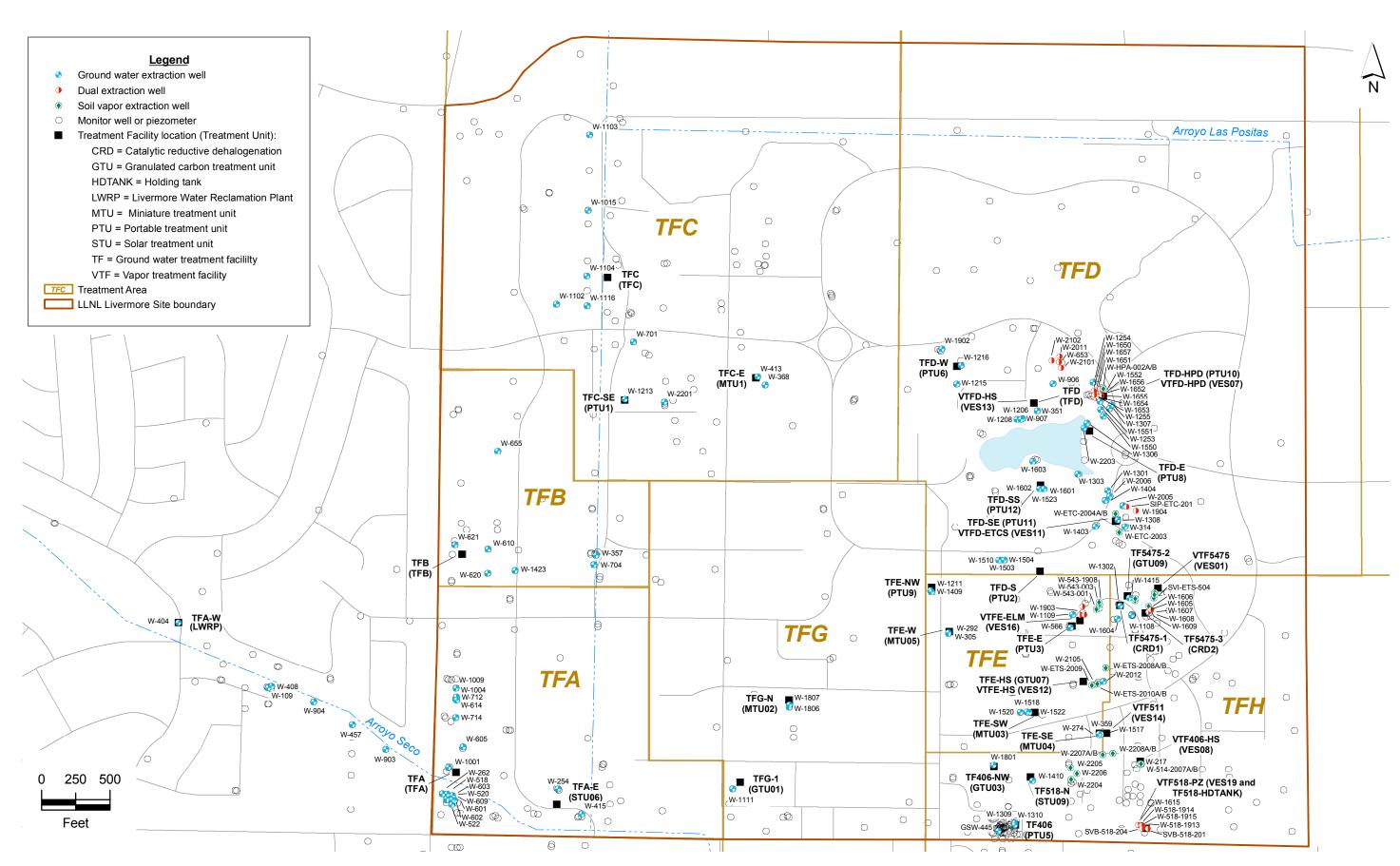


Figure 1. Livermore Site treatment areas and treatment facility locations.

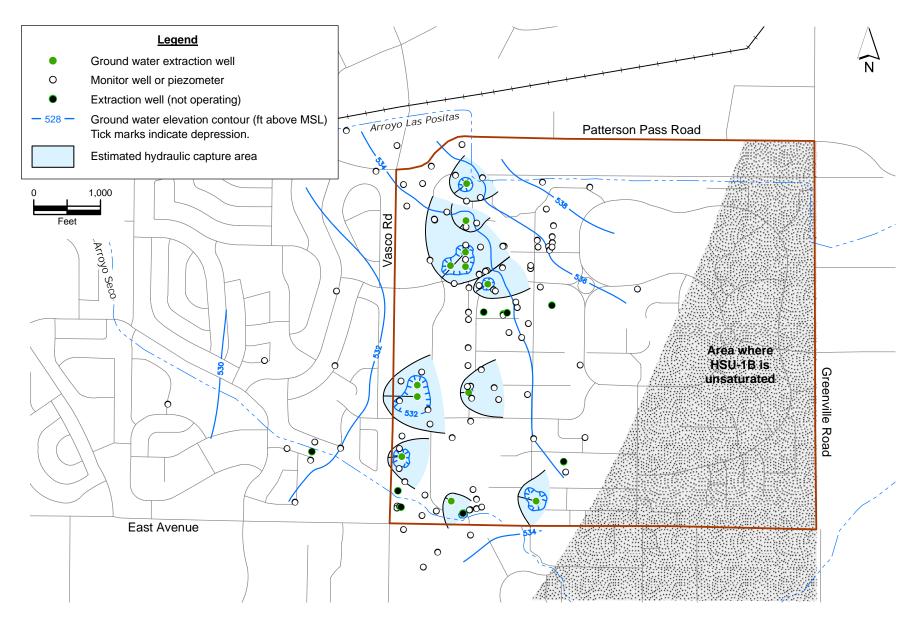


Figure 2. Ground water elevation contour map based on 127 wells completed within HSU-1B showing estimated hydraulic capture areas, LLNL and vicinity, July, 2008.

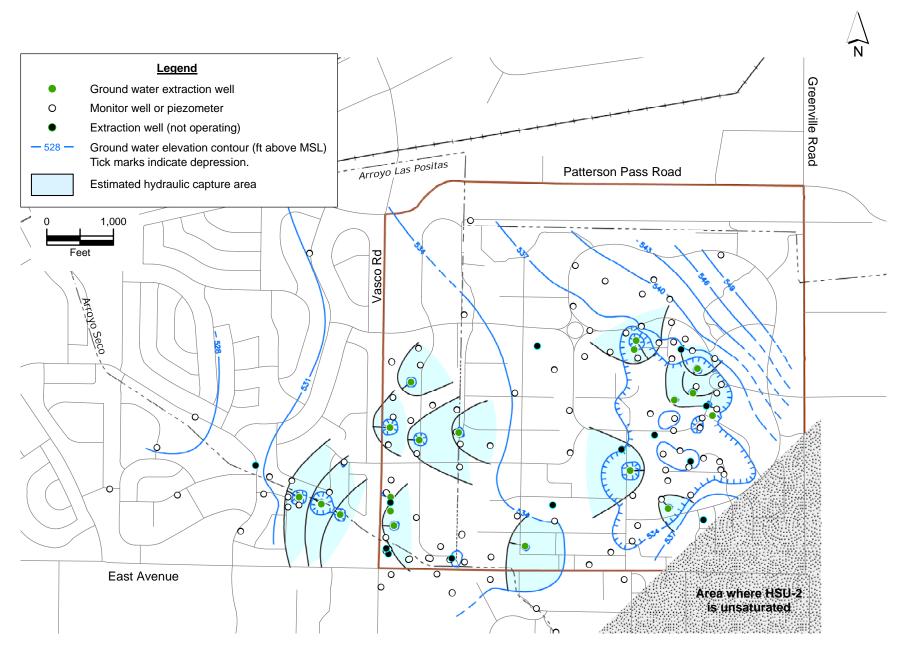


Figure 3. Ground water elevation contour map based on 145 wells completed within HSU-2 showing estimated hydraulic capture areas, LLNL and vicinity, July 2008.

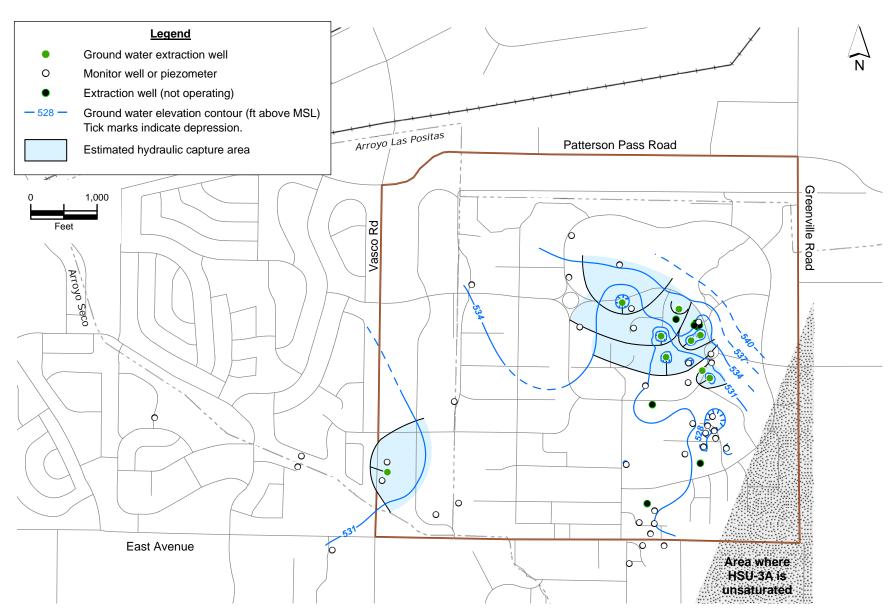


Figure 4. Ground water elevation contour map based on 61 wells completed within HSU-3A showing estimated hydraulic capture areas, LLNL and vicinity, July 2008.

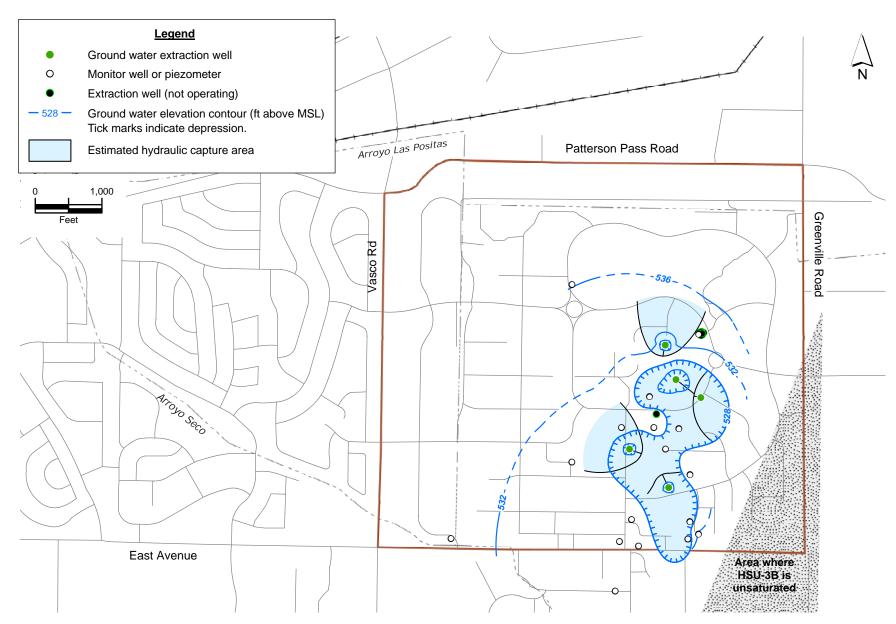


Figure 5. Ground water elevation contour map based on 29 wells completed within HSU-3B showing estimated hydraulic capture areas, LLNL and vicinity, July 2008.

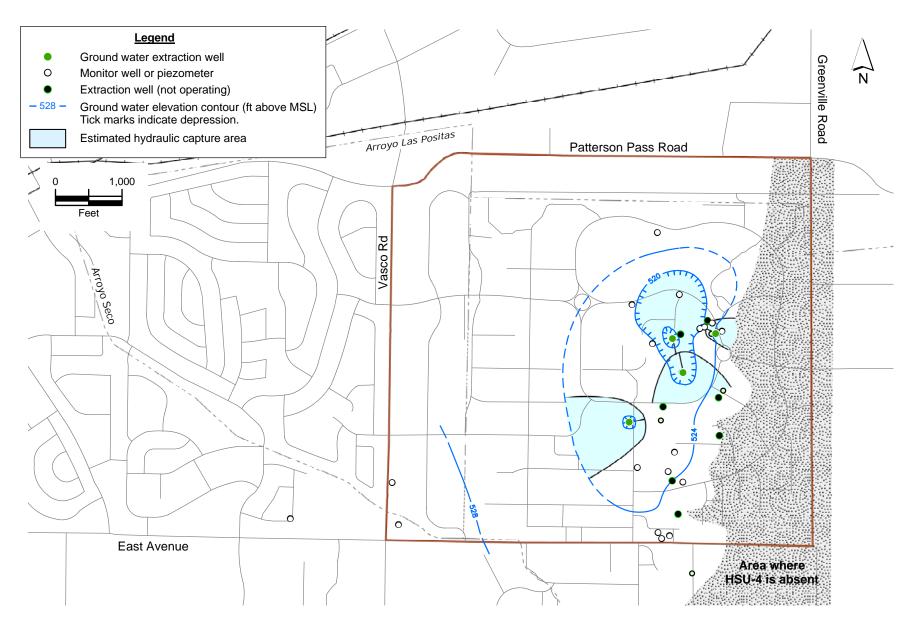


Figure 6. Ground water elevation contour map based on 35 wells completed within HSU-4 showing estimated hydraulic capture areas, LLNL and vicinity, July 2008.

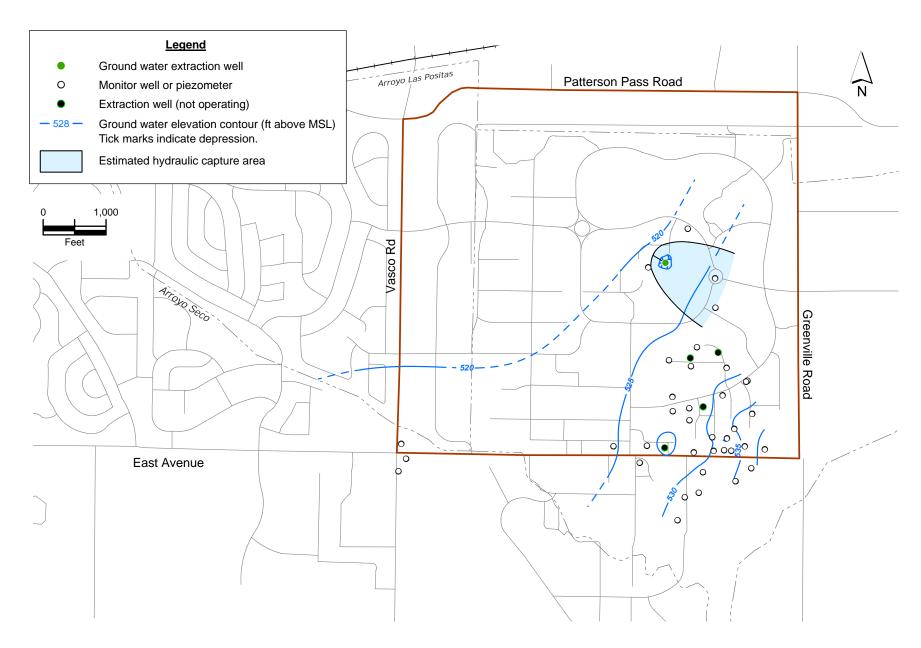


Figure 7. Ground water elevation contour map based on 45 wells completed within HSU-5 showing estimated hydraulic capture areas, LLNL and vicinity, July 2008.